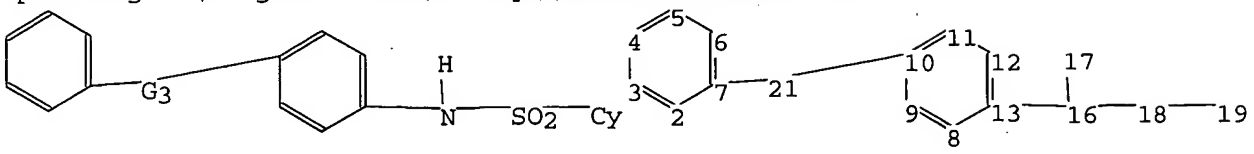
* * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * *

=>
Uploading C:\Program Files\Stnexp\Queries\11810325.str



chain nodes :
16 17 18 19 21
ring nodes :
2 3 4 5 6 7 8 9 10 11 12 13
chain bonds :
7-21 10-21 13-16 16-17 16-18 18-19
ring bonds :
2-3 2-7 3-4 4-5 5-6 6-7 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
7-21 10-21 13-16 16-18 18-19
exact bonds :
16-17
normalized bonds :
2-3 2-7 3-4 4-5 5-6 6-7 8-9 8-13 9-10 10-11 11-12 12-13
isolated ring systems :
containing 8 :

G1:O,S

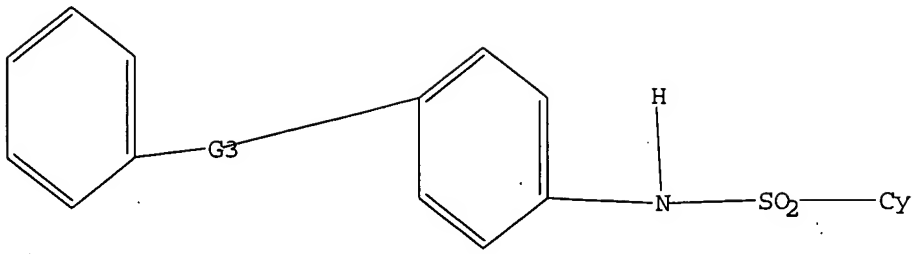
G2

G3:C,O,S

Match level :
2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 16:CLASS 17:CLASS 18:CLASS 19:Atom 21:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 O,S

G2

G3 C,O,S

Structure attributes must be viewed using STN Express query preparation.

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=> s l1 full
L3          1222 SEA SSS FUL L1

=> file ca

=> s l3
L4           482 L3

=> s l4 and py<2000
      19363962 PY<2000
L5           403 L4 AND PY<2000

=> s l5 and (ppar or drug?)
          5839 PPAR
        722547 DRUG?
L6            20 L5 AND (PPAR OR DRUG?)

=> s l5 and drug?
        722547 DRUG?
L7            18 L5 AND DRUG?

=> s l5 and ppary
            15 PPARY
L8           0 L5 AND PPARY

=> s l5 and ppar
          5839 PPAR
L9            2 L5 AND PPAR

=> s l5 and pharm?
        518794 PHARM?
L10           27 L5 AND PHARM?

=> s l5 and modulat?
        297078 MODULAT?
L11           2 L5 AND MODULAT?

=> s l6 or l7 or l8 or l9 or l10 or l11
L12           41 L6 OR L7 OR L8 OR L9 OR L10 OR L11

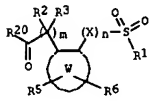
=> d ibib abs fhitstr 1-41
```

L12 ANSWER 1 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 139:307685 CA
TITLE: Preparation of sulfonyl aryl or heteroaryl hydroxamic acid compounds as matrix metalloprotease inhibitors
INVENTOR(S): Bedell, Louis J.; Mcdonald, Joseph J.; Barta, Thomas E.; Becker, Daniel P.; Rao, Shashidhar N.; Freskos, John N.; Mischke, Brent V.; Getman, Daniel P.; Decrescenzo, Gary A.; Villamil, Clara I.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: U.S. Pat. Appl. Publ., 200 pp., Cont.-in-part of U.S. Ser. No. 230,209.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003191317	A1	20031009	US 2000-728408	20001201
US 6794511	B2	20040921		
WO 9838859	A1	19980911	WO 1998-US4300	19980304 <--
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GH, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 2001020021	A1	20010906	US 1999-230209	19990624
US 6380258	B2	20020430		
US 2003073845	A1	20030417	US 2001-909227	20010719
US 6696449	B2	20040224		
US 2005075374	A1	20050407	US 2004-867391	20040614

PRIORITY APPLN. INFO.:
US 1998-US4300 A1 19980304
US 1999-310813 B1 19990512
US 1999-230209 A2 19990624
US 1997-35182P P 19970304
US 2000-569034 A2 20000511
US 2000-728408 A2 20001201

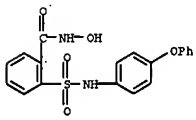
OTHER SOURCE(S): MARPAT 139:307685
GI



I

AB The title compds. [I; m, n = 0 or 1 and the sum of m + n is 0 or 1; the

L12 ANSWER 1 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 1 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
ring structure W is a 5- or 6-membered arom. or heteroarom. ring; X = CH2 or (un)substituted NH2; R1 = (i) a substituent contg. a 5- or 6-membered cyclohydrocarbyl, heterocyclyl, aryl or heteroaryl radical bonded directly to the depicted SO2 group or (ii) (un)substituted; R2, R3 = H, alkyl, alkenyl, alkynyl, hydroxyalkyl, O- or S-(un)substituted hydroxyalkyl or mercaptoalkyl, hydroxy, thiol, haloalkyl, N-(un)substituted amino, aminoalkyl, aminoalkanoylaminoalkyl, aminoalkoxy, or aminoalkoxyalkyl, heterocyclyl, heterocyclylalkyl, heterocyclyloxy, heterocyclylthio, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylthio; or CR2R3 together forms an (un)substituted 4- to 8-membered carbocyclic or heterocyclic ring, that is preferably a 5- or 6-membered ring; R5, R6 = H, alkyl, cycloalkyl, acylalkyl, halo, NO2, HO, cyano, alkoxy, haloalkyl, haloalkoxy, hydroxyalkyl, N-(un)substituted aminoalkyl or aminoalkoxy, thiol, alkylthio, arylthio, cycloalkylthio, cycloalkoxy, alkoxyalkoxy, perfluoroalkyl, haloalkyl, heterocyclyloxy; or R5 and R6 together with the atoms to which they are bonded form a further aliph. or arom. carbocyclic or heterocyclic ring having 5- to 7-members; R20 = each (un)substituted OH, NHOH, or NH2] or pharmaceutically acceptable salts thereof are prepd. Also disclosed is a treatment process that comprises administering a contemplated sulfonyl arom. or heteroarom. ring hydroxamic acid compd. in a matrix metalloprotease (MMP) enzyme-inhibiting effective amt. to a host having a condition assocd. with pathol. MMP activity. Thus, thioetherification of 4-phenoxybenzenethiol with 2-fluorobenzaldehyde in the presence of K2CO3 in isopropanol under reflux for 20 h gave 2-(4-phenoxyphenylthio)benzaldehyde which was condensed with tetra-Et dimethylaminomethylenediphosphonate in the presence of NaH in THF at room temp. for 4 h gave to 2-[2-(4-phenoxyphenylthio)phenyl]acetic acid (II). II was oxidized by H2O2 in acetic acid to 2-[2-(4-phenoxyphenylsulfonyl)phenyl]acetic acid which was condensed with O-tetrahydropyranylhydroxylamine using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in MeCN followed by treatment with p-toluenesulfonic acid in methanol at room temp. for 2 h to give N-hydroxy-2-[2-(4-phenoxyphenylsulfonyl)phenyl]acetamide (III). III and N-hydroxy-2,3-dimethoxy-6-[[4-[4-(trifluoromethyl)phenoxy]-1-piperidinyl]sulfonyl]benzamide showed IC50 of >10,000 nM against MMP-1, 0.3 and 2.4 nM, resp., against MMP-2, and 2 and 2.7 nM, resp., against MMP-13.
IT 308385-50-4P, N-Hydroxy-2-[[(4-phenoxyphenyl)amino]sulfonyl]benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfonyl aryl or heteroaryl hydroxamic acid compds. as matrix metalloprotease inhibitors)
RN 308385-50-4 CA
CN Benzamide, N-hydroxy-2-[[(4-phenoxyphenyl)amino]sulfonyl]- (9CI) (CA INDEX NAME)

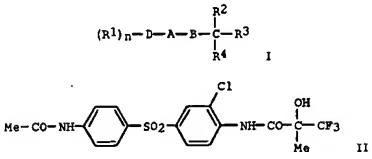
L12 ANSWER 2 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:22753 CA
TITLE: Preparation of N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivatives for the elevation of pyruvate dehydrogenase (PDH) activity
INVENTOR(S): Butlin, Roger John; Nowak, Thorsten; Burrows, Jeremy Nicholas; Block, Michael Howard
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 211 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962506	A1	19991209	WO 1999-GB1669	19990526 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2331685	AA	19991209	CA 1999-2331685	19990526 <--
AU 9940524	A1	19991220	AU 1999-40524	19990526 <--
AU 740909	B2	20011115		
BR 9910821	A	20010213	BR 1999-10821	19990526
EP 1082110	A1	20010314	EP 1999-923767	19990526
EP 1082110	B1	20040324		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200003524	T2	20011022	TR 2000-200003524	19990526
EE 200000691	A	20020415	EE 2000-691	19990526
JP 2002516854	T2	20020611	JP 2000-551762	19990526
NZ 507784	A	20021025	NZ 1999-507784	19990526
AT 262327	E	20040415	AT 1999-923767	19990526
PT 1082110	T	20040730	PT 1999-923767	19990526
ES 2217754	T3	20041101	ES 1999-923767	19990526
RU 2242224	C2	20041220	RU 2000-133221	19990526
ZA 2000006645	A	20020815	ZA 2000-6645	20001115
US 6498275	B1	20021224	US 2000-700370	20001115
NO 2000006010	A	20010126	NO 2000-6010	20001128
HK 1033652	A1	20040930	HK 2001-104230	20010619
US 2004009979	A1	20040115	US 2002-277957	20021023

PRIORITY APPLN. INFO.:
GB 1998-11427 A 19980529
WO 1999-GB1669 W 19990526
US 2000-700370 A3 20001115

OTHER SOURCE(S): MARPAT 132:22753
GI

L12 ANSWER 2 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



I

II

AB Aryl Ph sulfone and sulfoxide derivs. (I) [where ring D = (un)substituted Ph, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, or other 6-membered N-containing heteroaryl ring; R1 = (hetero)arylsulfonyl, (hetero)arylsulfinyl, (hetero)arylcarbonyl, (halo)alkyl, (halo)alkoxy, alkenyloxy, cyano, NO2, halo, S-CF3, OH, or a variety of (un)substituted functional groups; n = 1 or 2; R2 and R3 = independently (halo)alkyl or 3-5 membered (halo)cycloalkyl ring; A-B = NH-C(O), O-CH2, S-CH2, (trans)-vinylene, ethynylene, NH-C(S), or C(O)-CH2; R4 = H, OH, halo, NH2, or Me], and **pharmaceutically** acceptable salts or in vivo hydrolysable esters thereof, were prepared **Pharmaceutical** compns., methods, and processes for preparation of compds. of formula I are also described. For example, (R)-(+)-2-hydroxy-2-methyl-3,3,3-trifluoropropanoic acid (preparation given) was mixed with oxalyl chloride and added to 4-(4-acetamidophenylsulfonyl)-2-chloroaniline (preparation given) in DCM to yield (R)-N-[4-(4-acetamidophenylsulfonyl)-2-chlorophenyl]-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide (R)-(II). Title compds. elevate pyruvate dehydrogenase (PDH) activity (no data) and are useful in the treatment of diabetes mellitus, peripheral vascular disease, cardiac failure and certain cardiac myopathies, myocardial ischemia, cerebral ischemia and perfusion, muscle weakness, hyperlipidemias, Alzheimer's disease, and/or atherosclerosis.

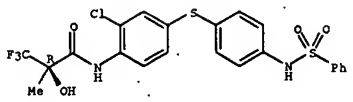
IT **252018-30-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(target compound; preparation of N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivs. for elevation of pyruvate dehydrogenase (PDH) activity)

RN 252018-30-7 CA

CN Propanamide, N-[2-chloro-4-[[4-[(phenylsulfonyl)amino]phenyl]thio]phenyl]-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 2 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 131:164931 CA

TITLE: Determination of 4,4'-diaminodiphenyl sulfone and its derivatives in biological samples by spectrophotometry and chromatography

AUTHOR(S): Evgen'ev, M. I.; Garmonov, S. Yu.; Pogorel'tsev, V. I.; Shakirova, E. F.

CORPORATE SOURCE: Kazan State Technological Univ., Kazan, 420015, Russia

SOURCE: Journal of Analytical Chemistry (Translation of Zhurnal Analiticheskoi Khimii) (1999), 54(6), 543-548
CODEN: JACTE2; ISSN: 1061-9348

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

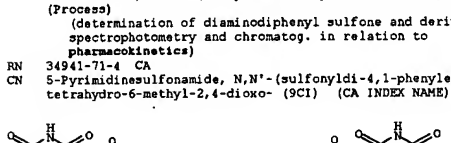
LANGUAGE: English

AB Spectrophotometry and high-performance liquid and thin-layer chromatog. were used for determining medicinal substances such as 4,4'-diaminodiphenyl sulfone and tetrasodium 4,4'-bis-(3-phenyl-1,3-disulfopropylamino)-diphenyl sulfonate as their dinitrobenzoxadiazole derivs. in blood serum, urine, saliva, and gastric juices. The determination conditions were examined and optimized. The detection limit was 1 X 10-6 M. The procedures developed were used for investigating the kinetics and metabolism of xenobiotics in the human body.

IT **34941-71-4**, Diucifone
RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(determination of diaminodiphenyl sulfone and derivs. in biol. samples by spectrophotometry and chromatog. in relation to **pharmacokinetics**)

RN 34941-71-4 CA

CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 131:144406 CA

TITLE: Preparation of **PPAR-GAMMA modulators** on treatment of type II diabetes and obesity

INVENTOR(S): De La Brouse-Elwood, Fabienne; Jaen, Juan C.; McGee, Lawrence R.; Miao, Shi-Chang; Rubenstein, Steven Marc; Chen, Jin-Long; Cushing, Timothy D.; Flygare, John A.; Houze, Jonathan B.; Kearney, Patrick C.

PATENT ASSIGNEE(S): Tularik Inc., USA

SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9938845	A1	19990805	WO 1999-US1147	19990120 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2318731	AA	19990805	CA 1999-2318731	19990120 <--
AU 9921176	A1	19990816	AU 1999-21176	19990120 <--
AU 759255	B2	20030410		
EP 1053227	A1	20001122	EP 1999-901492	19990120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6200995	B1	20010313	US 1999-234327	19990120
JP 2002501945	T2	20020122	JP 2000-530082	19990120
US 2001027200	A1	20011004	US 2000-741415	20001219
US 6620827	B2	20030916		
US 2002169185	A1	20021114	US 2001-894980	20010627
US 6583157	B2	20030624		
US 2003088103	A1	20030508	US 2002-123298	20020415

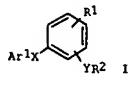
PRIORITY APPLN. INFO.:

US 1998-73042P	P	19980129
US 1999-234327	A1	19990120
WO 1999-US1147	W	19990120
US 2000-214810P	P	20000628
US 2000-741415	A1	20001219

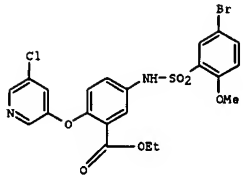
OTHER SOURCE(S): MARPAT 131:144406

GI

L12 ANSWER 4 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



I



II

AB Title compds. [I; Ar1 is aryl; X is a divalent linkage of alkylene, alkylenoxy, -O-, -C(O)-, -N(R11)-, -N(R11)C(O)-, -S(O)k- and a single bond, in which R11 is hydrogen, alkyl, heteroalkyl, and arylalkyl and the subscript k is an integer of from 0 to 2; Y is a divalent linkage selected from alkylene, -O-, -C(O)-, -N(R12)-S(O)m-, -N(R13)-S(O)m-N(R13)-, -N(R12)C(O)-, -S(O)n-, a single bond, and combinations thereof in which R12 and R13 are members independently selected from the group consisting of hydrogen, alkyl, heteroalkyl and arylalkyl; and the subscripts m and n independently integers of from 0 to 2; R1 represents a member selected from the group consisting of hydrogen, alkyl, heteroalkyl, aryl, arylalkyl, -CO2R14, -CO(R)14, -C(O)NR15R16, -S(O)p-R14, -S(O)q-NR15R16, -O-C(O)-OR17, -O-C(O)-R17, -O-C(O)-NR15R16, -N(R14)-C(O)-NR15R16, -N(R14)-C(O)-R17 and -N(R14)-C(O)-OR17, in which R14 is hydrogen, alkyl, heteroalkyl, aryl and arylalkyl, and R15 and R16 are independently of hydrogen, alkyl, heteroalkyl, aryl and arylalkyl, or taken together with the nitrogen to which each is attached from a 5-, 6- or 7-membered ring; R17 R2 are independently of alkyl, heteroalkyl, aryl, arylalkyl; p = 0-3; q = 1-2] and **pharmaceutical** compns. containing the compds. described above for the treatment of conditions such as type II diabetes and obesity. Thus, the title compound II was prepared

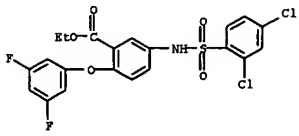
IT **235427-19-7P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of **PPAR-GAMMA modulators** on treatment of type II diabetes and obesity)

RN 235427-19-7 CA

CN Benzoic acid, 5-[[(2,4-dichlorophenyl)sulfonyl]amino]-2-(3,5-difluorophenoxy)-, ethyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 4 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 131:73645 CA

TITLE: Preparation of arylthiazolidinediones as agonists of peroxisome proliferator activated receptor.

INVENTOR(S): Sahoo, Soumya P.; Tolman, Richard L.; Han, Wei; Bergmann, Jeffrey; Santini, Conrad; Lombardo, Vicki R.; Desai, Ranjit; Boueres, Julia K.; Gratale, Dominick F.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 133 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

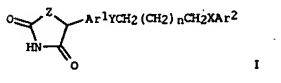
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9932465	A1	19990701	WO 1998-US27139	19981218 <--
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6008237	A	19991228	US 1998-213542	19981217 <--
CA 2315397	AA	19990701	CA 1998-2315397	19981218 <--
AU 9918334	A1	19990712	AU 1999-18334	19981218 <--
AU 740733	B2	20011115		
BR 9813801	A	20001003	BR 1998-13801	19981218
EP 1040102	A1	20001004	EP 1998-963283	19981218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
TR 200001753	T2	20001121	TR 2000-200001753	19981218
JP 2001526278	T2	20011218	JP 2000-525402	19981218
JP 3373198	B2	20030204		
ZA 9903232	A	19991111	ZA 1999-3232	19990511 <--
NO 2000003112	A	20000818	NO 2000-3112	20000616
BG 104602	A	20010131	BG 2000-104602	20000713

PRIORITY APPLN. INFO.: US 1997-68271P P 19971219
GB 1998-16279 A 19980727
US 1998-105238P P 19981022
WO 1998-US27139 W 19981218

OTHER SOURCE(S): MARPAT 131:73645

GI



I

AB Title compds. [I; Ar1 = (substituted) arylene, heterosarylene; Ar2 = o-substituted aryl, heteroaryl; X, Y = O, S, imino, CH2; Z = O, S; n = 0-3], were prepared for treatment of of diabetes, hyperglycemia, hyperlipidemia, atherosclerosis, obesity, vascular restenosis, etc. (no data). Thus, Me 4-hydroxyphenylacetate, Br(CH2)3Br, and K2CO3 were

L12 ANSWER 5 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

stirred overnight in DMF to give Me 4-(3-bromophenoxy)phenylacetate. This was stirred with 4-phenoxy-2-propylphenol and Cs2CO3 in DMF at 40° overnight to give Me 4-[3-(2-propyl-4-phenoxyphenoxy)propoxy]phenylacetate. The latter was added to a mixt. of LiN(SiMe3)2 and Me3SiCl in THF at -78°; after 2 h N-bromosuccinimide was added and the mixt. was stirred overnight at room temp. to give the α-bromo deriv., which was stirred with thiourea and NaOAc in methoxyethanol at 115° for 5 h to give 5-[4-[3-(2-propyl-4-phenoxyphenoxy)propoxy]phenyl]-2,4-thiazolidinedione.

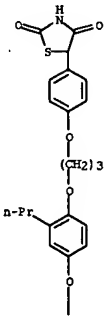
IT **228577-39-7P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn of arylthiazolidinedione derivs. as peroxisome proliferator activated receptor agonists)

RN 228577-39-7 CA

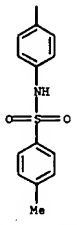
CN Benzenesulfonamide, N-[4-[4-[3-[4-(2,4-dioxo-5-thiazolidinyl)phenoxy]propoxy]-3-propylphenoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A



L12 ANSWER 5 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

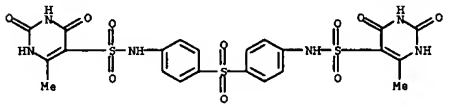
L12 ANSWER 6 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:332470 CA
TITLE: Pyrimidine derivatives **modulate** expression of key cell surface molecules on immunocytes: evidence for a systemic immunopotentiatory effect
AUTHOR(S): Tsibul'kin, A. P.; Slabnov, Yu. D.; Pozdeev, O. K.; Cherepnev, G. V.; Garaev, R. S.; Istamov, Kh. I.
CORPORATE SOURCE: Kazan. Gos. Med. Akad., Kazan, Russia
SOURCE: Immunologiya (Moscow) (1998), (4), 29-33
CODEN: IMUNDA; ISSN: 0206-4952
PUBLISHER: Meditsina
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Pyrimidine derivs. xymedone and diuciphone, tested in a set of immunodeficiency models in vitro (10-3 M) and in vivo (30 mg/kg), upregulated ER expression on lymphocytes and FcγR/C3bR expression on antigen-presenting cells. These were accompanied by restoration of T-cell immune response as proved by delayed-type hypersensitivity reaction and an increase in antibody producers to SRBC. Mechanisms of a systemic immunopotentiatory effect of pyrimidine derivs. are discussed.

IT **34941-71-4**, Diuciphone
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pyrimidine derivs. **modulate** expression of key cell surface mols. on immunocytes: systemic immunostimulatory effect)

RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)

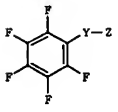


L12 ANSWER 7 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:223060 CA
TITLE: Preparation of pentafluorobenzenesulfonamides for treating atherosclerosis and hypercholesterolemia
INVENTOR(S): Medina, Julio Cesar; Clark, David Louis; Flygare, John A.; Rosen, Terry J.; Shan, Bei
PATENT ASSIGNEE(S): Tularik Inc., USA
SOURCE: U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 605,431, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5880151	A	19990309	US 1997-896827	19970718 <--
EP 1334719	A2	20030813	EP 2003-9125	19970222
EP 1334719	A3	20030924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PT 896533	T	20040227	PT 1997-907843	19970222
ES 2205183	T3	20040501	ES 1997-907843	19970222
US 6121304	A	20000919	US 1999-227216	19990106
US 6316484	B1	20011113	US 2000-633740	20000807
US 2002143036	A1	20021003	US 2001-972743	20011005
PRIORITY APPLN. INFO.:			US 1996-605431	B2 19960222
			EP 1997-907843	A3 19970222
			US 1997-896827	A1 19970718
			US 1999-227216	A1 19990106
			US 2000-633740	A1 20000807

OTHER SOURCE(S): MARPAT 130:223060
GI



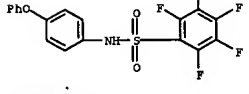
I

AB The title compds. [I; Y = SO, SO2; Z = NR1R2 (wherein R1 = H, (un)substituted C1-10 alkyl, C3-6 alkenyl, C2-6 heteroalkyl; R2 = (un)substituted Ph)], useful as **pharmacol.** agents in the treatment of disease states, particularly atherosclerosis, pancreatitis, hypercholesterolemia, and hyperlipoproteinemia or as lead compds. for the development of such agents, were prepared Thus, reaction of N,N-dimethyl-1,4-phenyldiamine.2HCl with pentafluorophenylsulfonyl chloride in pyridine afforded 63% I [Y = SO2; Z = 4-(Me2N)C6H4NH] which showed ECmax of 0.5 μM for their ability to increase LDL receptor expression in Hep G2 cells.

IT **195534-14-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pentafluorobenzenesulfonamides for treating atherosclerosis

L12 ANSWER 7 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
and hypercholesterolemia)

RN 195534-14-6 CA
CN Benzenesulfonamide, 2,3,4,5,6-pentafluoro-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



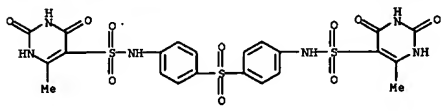
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 130:29309 CA
TITLE: Identification and monitoring of the quality of diucifone and its intermediate by 1H NMR method
AUTHOR(S): Vishnevskii, O. V.; Volovenko, Yu. M.; Kudryavtsev, A. A.; Ovrutskii, V. M.
CORPORATE SOURCE: Inst. Farmakol. Toksikol., AMN Ukr., Kiev, Ukraine
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1998), 32(8), 55-56
CODEN: KHFZAN; ISSN: 0023-1134
PUBLISHER: Izdatel'stvo Folium
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The mol. structures of diucifone and its semiproduct 6-methyluracil-5-sulfochloride are confirmed by 1H NMR. It was demonstrated that the method could be used to control purity of the drug.

IT **34941-71-4**, Diucifone
RL: ANT (Analyte); ANST (Analytical study)
(identification and monitoring of the quality of diucifone and its intermediate by 1H NMR method)

RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 9 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 129:202764 CA
TITLE: Preparation of arylsulfonamides and related compounds as cannabinoid CB1 and CB2 receptor agonists.
INVENTOR(S): Mittendorf, Joachim; Dressel, Juergen; Matzke, Michael; Keldenich, Joerg; Mohrs, Klaus-Helmut; Raddatz, Siegried; Franz, Juergen; Spreyer, Peter; Voehringer, Verena; Schuhmacher, Joachim; Rock, Michael-Harold; Horvath, Ervin; Friedel, Arno; Mauler, Frank; De Vry, Jean; Jork, Reinhard
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 194 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19740785	A1	19980827	DE 1997-19740785	19970917 <--
CA 2281929	AA	19980827	CA 1998-2281929	19980210 <--
CA 2470183	AA	19980827	CA 1998-2470183	19980210 <--
WO 9837061	A1	19980827	WO 1998-EP716	19980210 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9863965	A1	19980909	AU 1998-63965	19980210 <--
AU 735137	B2	20010705		
EP 966436	A1	19991229	EP 1998-909427	19980210 <--
EP 966436	B1	20021211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI				
TR 9902012	T2	20000121	TR 1999-9902012	19980210
BR 9807848	A	20000321	BR 1998-7848	19980210
JP 2001515470	T2	20010918	JP 1998-536215	19980210
AT 229502	E	20021215	AT 1998-909427	19980210
PT 966436	T	20030331	PT 1998-909427	19980210
RU 2203272	C2	20030427	RU 1999-120092	19980210
ES 2189142	T3	20030701	ES 1998-909427	19980210
IL 131010	A1	20040328	IL 1998-131010	19980210
TW 527343	B	20030411	TW 1998-87102305	19980219
ZA 9801419	A	19980824	ZA 1998-1419	19980220 <--
BG 63915	B1	20030630	BG 1999-103646	19990810
NO 9904014	A	19991012	NO 1999-4014	19990819 <--
NO 314141	B1	20030203		
MX 9907687	A	20000531	MX 1999-7687	19990819
US 6262112	B1	20010717	US 1999-367456	19991115
US 2002072529	A1	20020613	US 2001-878392	20010611
US 6573278	B2	20030603		
PRIORITY APPLN. INFO.:			DE 1997-19706902	A1 19970221
			DE 1997-19740785	A 19970917

L12 ANSWER 9 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

CA 1998-2281929	A3	19980210
WO 1998-EP716	W	19980210
US 1999-367456	A3	19991115

OTHER SOURCE(S): MARPAT 129:202764
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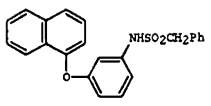
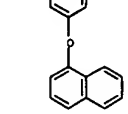


I

AB R1ADEGLR [R1 = aryl, quinolyl, isoquinolyl, etc.; A; E = bond, alkylene; D = O, S, SO, SO2, imino; G = (substituted) (hetero)arylene; L = O, NH, N(OH)SO2, NHSO, NHSO2, etc.; R = (substituted) alkyl, alkenyl, alkynyl, aryl, heterocyclyl, morpholinyl, cycloalkyl, etc.], were prepared Thus, title compound (I) showed IC50 = 0.9 nM/L in a rat CB1 receptor luciferase screen.

IT **212187-61-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of arylsulfonamides and related compds. as CB1 and CB2 receptor agonists)

RN 212187-61-6 CA
CN Benzenesulfonamide, N-[4-(1-naphthalenyloxy)phenyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 10 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 128:167254 CA
TITLE: Pentafluorobenzenesulfonamides and analogs useful as antiproliferative agents
INVENTOR(S): Flygare, John; Medina, Julio; Shan, Bei; Clark, David; Rosen, Terry
PATENT ASSIGNEE(S): Tularik, Inc., USA
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805315	A1	19980212	WO 1997-US12720	19970718 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2260777	AA	19980212	CA 1997-2260777	19970718 <--
AU 9738877	A1	19980225	AU 1997-38877	19970718 <--
AU 710173	B2	19990916		
CN 1225009	A	19990804	CN 1997-196427	19970718 <--
EP 939627	A1	19990908	EP 1997-936133	19970718 <--
EP 939627	B1	20030910		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9710737	A	20000111	BR 1997-10737	19970718
JP 2000515545	T2	20001121	JP 1998-507937	19970718
JP 3421350	B2	20030630		
US 6482860	B1	20021119	US 1997-896280	19970718
AT 249214	E	20030915	AT 1997-936133	19970718
PT 939627	T	20040227	PT 1997-936133	19970718
ES 2201313	T3	20040316	ES 1997-936133	19970718
KR 2000022556	A	20000425	KR 1998-711004	19981230
HK 1021699	A1	20050107	HK 2000-100662	20000203
US 2003162817	A1	20030828	US 2002-270259	20021011
PRIORITY APPLN. INFO.:			US 1996-22198P	P 19960719
			US 1997-896280	A1 19970718
			WO 1997-US12720	W 19970718

OTHER SOURCE(S): MARPAT 128:167254
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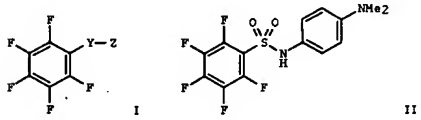


I II

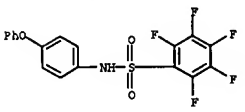
L12 ANSWER 10 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

AB The invention provides methods and compns. relating to novel pentafluorophenylsulfonamide derivs. and analogs, and their use as **pharmacol.** active agents. The compds. bond covalently and selectively to Cys-239 of β-tubulin, and thereby disrupt microtubule formation. The compns. find particular use in the treatment of cancer, vascular restenosis, microbial infections, and psoriasis, or the compds. serve as leads for the development of **drugs**. The compns. include compds. of formula I [Y = S(O) or S(O)2; Z = NR1R2 or OR3; R1, R2 = H, (un)substituted alk(en/yn)yl, alkoxy, cycloalk(en)yl, (hetero)aryl, (hetero)aryloxy, etc.; R1 and R2 may be joined by a bond, alkylene, or heteroalkylene group; R3 = (un)substituted (hetero)aryl]. For example, sulfonamidation of N,N-dimethyl-1,4-phenylenediamine-2HCl with pentafluorophenylsulfonyl chloride in pyridine gave 63% title compound II. In an assay for inhibition of growth of HeLa cells (human cervical carcinoma) in vitro, II had an IC50 of < 0.05 μM.

IT **195534-14-6P**, 1-[(Pentafluorophenyl)sulfonamido]-4-phenoxybenzene
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pentafluorobenzenesulfonamides and analogs as antiproliferative and chemotherapeutic agents)

RN 195534-14-6 CA

CN Benzenesulfonamide, 2,3,4,5,6-pentafluoro-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 124:352867 CA

TITLE: Identification and spectrophotometric determination of the drug Diutsifon

AUTHOR(S): Nuzhnova, N. I.; Litvinenko, A. V.

CORPORATE SOURCE: Kazan. Gos. Univ., Kazan, Russia

SOURCE: Farmatsiya (Moscow) (1995), 44(6), 15-18
CODEN: FRMTAL; ISSN: 0367-3014

PUBLISHER: RTs "Farmedinfo"

DOCUMENT TYPE: Journal

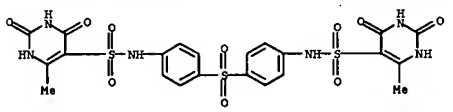
LANGUAGE: Russian

AB The authors have developed procedures for identifying Diutsifon which are based on the functional qual. anal. of the agent from reactions with calcium chloride (test for a hydroxypyrimidinyl sulfamide group), with N-dimethylaminobenzaldehyde (test for a diaminodiphenylsulfone fragment), and with sodium nitrite in DMPA medium (test for hydroxypyrimidinylsulfonic acid residue). The developed procedures have been used for identification of Diutsifon in powder.

IT **34941-71-4**, Diutsifon
RL: ANT (Analyte); ANST (Analytical study)
(identification and spectrophotometric determination of the drug Diutsifon in **pharmaceutical** powders)

RN 34941-71-4 CA

CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 12 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 123:143447 CA

TITLE: Preparation of anti-atherosclerotic diaryl compounds

INVENTOR(S): Arrowsmith, Richard James; Dann, John Gordon; Franzmann, Karl Witold; Hodgson, Simon Teanby; Wates, Peter John

PATENT ASSIGNEE(S): Wellcome Foundation Ltd., UK

SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

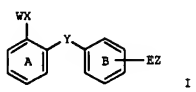
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9501326	A1	19950112	WO 1994-GB1409	19940629 <--
W: AU, CA, CN, CZ, FI, GE, HU, JP, KE, KR, KZ, LV, MW, NO, NZ, PL, RU, SD, SI, SK, UA, US, UZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2166413	AA	19950112	CA 1994-2166413	19940629 <--
AU 9470060	A1	19950124	AU 1994-70060	19940629 <--
ZA 9404688	A	19951229	ZA 1994-4688	19940629 <--
EP 706508	A1	19960417	EP 1994-918970	19940629 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
HU 73813	A2	19960930	HU 1995-1813	19940629 <--
JP 08512046	T2	19961217	JP 1994-503357	19940629 <--
US 5776951	A	19980707	US 1996-564281	19960411 <--
US 6043284	A	20000328	US 1998-18936	19980205

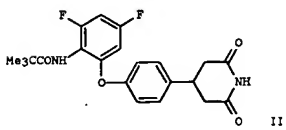
PRIORITY APPLN. INFO.: GB 1993-13459 A 19930630
GB 1994-6005 A 19940325
WO 1994-GB1409 W 19940629

OTHER SOURCE(S): MARPAT 123:143447

GI



I



II

AB Title compds. I (W = H, (substituted)C1-12 hydrocarbyl; X = NR1CONR2, NR1CO, NR1CO2, CONR2, O2CNR2 wherein R1, R2 H, C1-4 alkyl, halo-C1-4 alkyl; Y = bond, C2-4 alkenylene, C1-4 alkylene, etc.; E = bond, C1-4

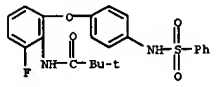
L12 ANSWER 12 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

alkylene, O2C,, CO2, SO2NR3, etc. wherein R3 = H, C1-4 alkyl, halo-C1-4 alkyl; Z = aliph. ring system, C1-8 alkyl, etc; ring A, B are optionally substituted) or a salt thereof, are prepd. 4-(Benzyloxy)benzaldehyde, Et acetoacetate and piperidine were reacted to give 3-[(4-benzyloxy)phenyl]glutaric acid which in 4 steps was converted to 2,4-difluoro-6-[4-(2,6-dioxo-4-piperidinyl)phenoxy]-5-aminobenzene to which in THF was addedEt3N and pivaloyl chloride to give the title compd. II. The antiatherosclerotic activity was demonstrated by inhibition of cholesterol acyltransferase for which the IC50 of some I and II was <10 μM. **Pharmaceutical** formulations comprising I are given.

IT **165118-82-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of anti-atherosclerotic diaryl compds.)

RN 165118-82-1 CA

CN Propanamide, N-[2-fluoro-6-[4-[(phenylsulfonyl)amino]phenoxy]phenyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

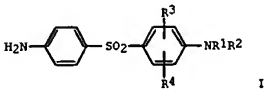


L12 ANSWER 13 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 117:26077 CA
TITLE: Anti-bacterial compositions comprising a substituted bis(4-aminophenyl) sulfone and a dihydrofolic acid reductase
INVENTOR(S): Seydel, Joachim K.; Pieper, Helmut; Kruger, Gerd; Noll, Klaus; Keck, Johannes; Lechner, Uwe
PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Germany
SOURCE: U.S., 15 pp. Cont.-in-part of U.S. 4,992,430.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5084449	A	19920128	US 1990-623833	19901207 <--
DE 3419009	A1	19851128	DE 1984-3419009	19840522 <--
US 4829058	A	19890509	US 1987-62291	19870615 <--
US 4992430	A	19910212	US 1989-302158	19890126 <--

PRIORITY APPLN. INFO.: DE 1984-3419009 A 19840522
US 1985-732024 B1 19850508
US 1987-62291 A3 19870615
US 1989-302158 A2 19890126

OTHER SOURCE(S): MARPAT 117:26077
GI

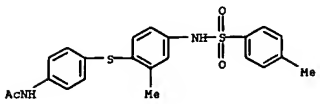


I

AB Title sulfones I [R1 = H, alkyl, cycloalkyl; R2 = H, C1-3 alkyl; R3 = cyano, (bis)-C1-3 alkylaminocarbonyl, C3-7-N-cycloalkyl-C1-3 alkylaminocarbonyl, alkylaminosulfonyl, HO, hydroxycarbonyl, halo, F3C, O2N, H2O, etc.; R4 = H, halo, HO, C1-3 alkoxy] or salts thereof, and **pharmaceuticals** comprising I and optionally cycloguanil or proguanil or other dihydrofolic acid reductase inhibitors, are prepared 4-MeC6H4SO2Cl in anhydrous pyridine and 4'-acetamido-4-amino-2-chlorodiphenyl sulfone were reacted and kept at ambient temperature for 3 h to give the tosyl derivative, which with K2CO3 was suspended and reacted with EtI at 90° for 24 h to give, after acid hydrolysis, I (R1 = R4 = H, R2 = Et, R3 = 2-Cl) (II). In a test for inhibiting 7,8-dihydropteroic acid synthesis of plasmodia, the i50 value of II was 2.10 μM vs. Dapsone and Fanasil 12.41 and 200, resp. **Pharmaceutical** formulations, comprising I alone and with dihydrofolic acid reductase inhibitors, are given.

IT **101513-43-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for antibacterials)

L12 ANSWER 13 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
RN 101513-43-3 CA
CN Acetamide, N-[4-[[2-methyl-4-[[(4-methylphenyl)sulfonyl]amino]phenyl]thio]phenyl]- (9CI) (CA INDEX NAME)

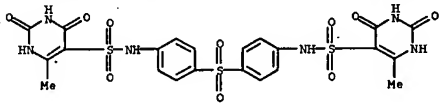


L12 ANSWER 14 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 116:187677 CA
TITLE: Development of novel antiviral agents on the basis of the inhibition of pathological processes in the infection of target organs
AUTHOR(S): Pozdeev, O. K.; Gil'manova, G. Kh.; Korobkova, V. D.; Andreev, S. V.
CORPORATE SOURCE: Inst. Org. Fiz. Khim. im. Arbuzova, Kazan, USSR
SOURCE: Nov. Podkhody Khimioter. Virusn. Infekts. (1991), 148-53. Editor(s): Kukain, R. A. Zinatne: Riga, USSR.
CODEN: 57SRAH
DOCUMENT TYPE: Conference
LANGUAGE: Russian

AB Pulmonary aerosol administration of immunostimulants (diutsifon and an unspecified sulfonic acid derivative) to mice infected with influenza A virus increased the levels of influenza-sp. IgM in the respiratory tract. Immunol. aspects of virus infection are discussed and **pharmacol.** methods for activating immune defenses in target organs (e.g., the lungs) are discussed.

IT **34941-71-4**, Diutsifon
RL: BIOL (Biological study)
(immunostimulant and virucidal activity of, after pulmonary administration of aerosol, in influenza A infection)

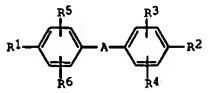
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 15 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 115:114130 CA
TITLE: Preparation of biphenyl compounds as drugs
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 68 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03056431	A2	19910312	JP 1990-167430	19900625 <--

PRIORITY APPLN. INFO.: GB 1989-14660 A 19890626
OTHER SOURCE(S): MARPAT 115:114130
GI

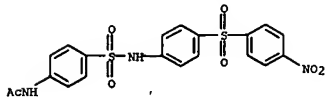


I

AB Biphenyl compds. [I; A = CH(OH), CH2, CO, COCH(OH), COCO, CONH, O, S, SO, etc.; R1 = halo, NH2, protected NH2, hydrazino, etc.; R2 = halo, (alkyl)amino, protected NH2, hydrazino, etc.; R3 = H, alkyl, halo, cyano, etc.; R4 = H, alkyl; R5, R6 = H, alkyl, halo], useful as analgesics, antiinflammatory agents, etc., are prepared Stirring a mixture of (4-H2NC6H4)2CO and MeONH2.HCl in MeOH at room temperature gave 77.0% (4-H2NC6H4)C:NOMe, which reduced carageenan-induced edema by 50% at 100 mg/kg orally in rats and controlled nephritis by 83% at 100 mg/kg orally in mice. Also prepared and tested as analgesics, antirheumatics, and blood platelet promoters were 101 addnl. I.

IT **60515-93-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of biphenyl drugs)

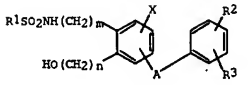
RN 60515-93-7 CA
CN Acetamide, N-[4-[[[4-[(4-nitrophenyl)sulfonyl]phenyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 16 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 113:58711 CA
TITLE: Preparation of N-(phenylalkyl)alkane- or -benzenesulfonamides as pharmaceuticals
INVENTOR(S): Hashimoto, Kinji; Inoue, Makoto; Goto, Kyoto; Kanai, Kenichi
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Factory, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

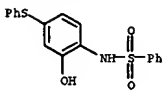
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02072150	A2	19900312	JP 1988-223880	19880906 <--
JP 05067619	B4	19930927		
PRIORITY APPLN. INFO.:			JP 1988-223880	19880906

OTHER SOURCE(S): MARPAT 113:58711
GI

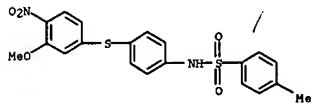


AB The title compds. (I; R1 = alkyl, Ph; m,n = 0-6; A = S, NH, bond, SO, SO2, alkylene, NCHO, O, CO; X = H, halo; R2 = H, halo, alkyl, alkoxy, NH2, OH, acylamino, alkoxycarbonyl, CO2H; R3 = H, halo, alkyl) useful as antiinflammatories, antirheumatics, antiasthmatics, allergy inhibitors, antipyretics, analgesics, antithrombotics, blood platelet aggregation inhibitors, etc. (no data), are prepared Thus, a solution of MeSO2Cl in CH2Cl2 was added dropwise under ice-cooling to a mixture of 2-amino-4-(4-methylphenylthio)phenol-HCl (preparation given), pyridine, and CH2Cl2 and the mixture was stirred 2.5 h to give N-[2-hydroxy-5-(4-methylthio)phenyl]methanesulfonamide. A total of 38 I were prepared
IT **128236-64-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as drug)
RN 128236-64-6 CA
CN Benzenesulfonamide, N-[2-hydroxy-4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)

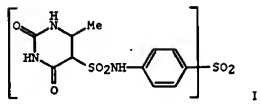
L12 ANSWER 16 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



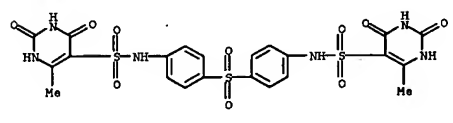
L12 ANSWER 17 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 111:224808 CA
TITLE: Studies on 2,3,N,N'-substituted 4,4'-diaminodiphenylsulfones as potential antimalarial agents
AUTHOR(S): Saxena, M.; Saxena, A. K.; Raina, R.; Chandra, S.; Sen, A. B.; Anand, N.; Seydel, J. K.; Wiese, M.
CORPORATE SOURCE: Cent. Drug Res. Inst., Lucknow, India
SOURCE: Arzneimittel-Forschung (1989), 39(9), 1081-4
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of new 4,4'-diaminodiphenylsulfones (I) substituted at the 2 and 3 position and also at the primary amino group of the Ph rings were synthesized and evaluated for their antimalarial activity against Plasmodium berghei infection in mice. Some of these compds. were active and showed complete inhibition of parasitemia which included I at 1 mg/kg i.p. for 4 days and 1 I at 0.3 mg/kg for 4 days. Some compds. tested for their synthetase inhibitory action in a cell-free system isolated from P. berthei were more active than diaminodiphenylsulfone. The difference in order of activity between these in vivo and in vitro tests may be due to differences in their **pharmacokinetic** properties.
IT **102003-38-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and alkylation of)
RN 102003-38-3 CA
CN Benzenesulfonamide, N-[4-[(3-methoxy-4-nitrophenyl)thio]phenyl]-4-methyl- (9CI) (CA INDEX NAME)



L12 ANSWER 18 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 110:237221 CA
TITLE: Polarographic determination of diutsifon
AUTHOR(S): Budnikov, G. K.; Kargina, O. Yu.; Lapshina, S. V.
CORPORATE SOURCE: Kazan. Gos. Univ., Kazan, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1989), 23(3), 347-9
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI

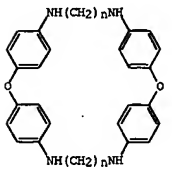


AB Diutsifon (I) was determined in tablets by a polarog. method. A linear relation between the reduction current and the drug concentration was observed in the range 8 + 10-6-10-2M. The method is also suitable for determining methyluracil as an impurity. The electrochem. behavior of I is discussed.
IT **34941-71-4**, Diutsifon
RL: ANST (Analytical study)
(determination of impurity and, in tablets, polarog.)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 19 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 110:9187 CA
TITLE: Interactions between water-soluble polyparacyclophanes and drugs (I). Design and synthesis of water-soluble polyparacyclophanes containing diphenyl ether skeletons
AUTHOR(S): Chun, In Koo; Lee, Min Hwa; Kim, Shin Keun
CORPORATE SOURCE: Dep. Pharm., Dongduck Women's Univ., Seoul, 136-130, S. Korea
SOURCE: Yakche Hakhoechi (1988), 18(2), 89-97
CODEN: YAHAEX; ISSN: 0259-2347
DOCUMENT TYPE: Journal
LANGUAGE: Korean
GI

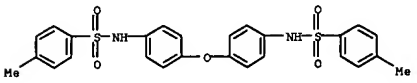


I

AB Water-soluble paracyclophanes (I, n = 3-6) were prepared for developing host compds. which might provide an efficient hydrophobic field. The preparation method consisted of tosylation of 4,4'-diaminodiphenyl ether, alkylation of the resulting tosylates with Br(CH2)nBr (n = 3-6) followed by detosylation with 47% HBr in phenol solution In addition the corresponding acyclic analog (p-MeNHC6H4)2O was prepared from the above tosylate by alkylation with MeI in the presence of K2CO3 in DMF followed by detosylation with 47% HBr in phenol.

IT **117964-11-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and alkylation of)

RN 117964-11-1 CA
CN Benzenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[4-methyl- (9CI) (CA INDEX NAME)



L12 ANSWER 19 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

L12 ANSWER 20 OF 41 CA COPYRIGHT 2005 ACS on STN

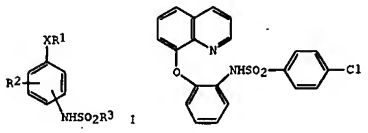
ACCESSION NUMBER: 109:110271 CA
TITLE: Substituted N-phenylsulfonamides, their preparation, **pharmaceuticals** containing them, and their use as enzymatic reaction and thrombocyte aggregation inhibitors
INVENTOR(S): Mohrs, Klaus; Perzborn, Elisabeth; Seuter, Friedel; Fruchtmann, Romanis; Kohlsdorfer, Christian
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 52 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3632329	A1	19880331	DE 1986-3632329	19860924 <--
EP 261539	A2	19880330	EP 1987-113393	19870914 <--
EP 261539	A3	19881019		
EP 261539	B1	19910306		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
AT 61357	E	19910315	AT 1987-113393	19870914 <--
JP 63093765	A2	19880425	JP 1987-237563	19870924 <--
US 5093340	A	19920303	US 1990-587594	19900924 <--
US 5070096	A	19911203	US 1990-614329	19901115 <--
US 5202336	A	19930413	US 1991-729020	19910712 <--

PRIORITY APPLN. INFO.:

DE 1986-3632329	A	19860924
US 1987-94239	B1	19870908
EP 1987-113393	A	19870914
US 1989-294958	B2	19890106
US 1989-402934	B1	19890905
US 1990-587594	A3	19900924
US 1990-614329	A3	19901115

OTHER SOURCE(S): CASREACT 109:110271; MARPAT 109:110271
GI



I II

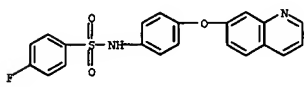
AB The title compds. I [R1 = (un)substituted pyridyl, quinolyl, or isoquinolyl; R2 = H, cyano, NO2, halo, (halo)alkyl, (halo)alkoxy, alkoxycarbonyl; R3 = (un)substituted aryl, C6F5, (un)substituted (cyclo)alkyl; X = O, AB, BA; A = O, NMe, CH2CH2NMe; B = CH2, CHMe; R1 = pyridyl when X = O] and their salts, useful as lipoxygenase inhibitors, thrombocyte aggregation inhibitors, inflammation inhibitors, and enzymic reaction inhibitors, were prepared 8-Hydroxyquinoline and K2CO3 in DMF was treated with 2-FC6H4NO2 in DMF 15 h at 25° to give 82% 8-(2-nitrophenoxy)quinoline which reacted with N2H4.H2O in refluxing MeOH containing 10% Pd/C in 2 h to give 69% 8-(2-aminophenoxy)quinoline. This was

L12 ANSWER 20 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

acylated with 4-ClC6H4SO2Cl in CH2Cl2 at 25°; after 1 h pyridine was added and the mixt. stirred 15 h at 25° to give 94% sulfonamide II. Thrombocyte aggregation inhibition occurred at a limiting concn. of 0.3-0.1 μg/mL II. N-[4-(4-Methyl-8-quinolinyloxy)phenyl]-4-chlorobenzenesulfonamide, at 2 mg/ear topically, gave 58% inhibition of mouse ear inflammation . N-[4-(7-Quinolinyloxy)phenyl]-4-fluorobenzenesulfonamide had IC50 of 3.3 + 10-8 g/mL for lipoxygenase inhibition.

IT **116253-12-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as **pharmaceutical**)

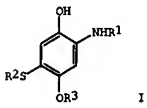
RN 116253-12-4 CA
CN Benzenesulfonamide, 4-fluoro-N-[4-(7-quinolinyloxy)phenyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 21 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 107:197776 CA
TITLE: Preparation of aminophenol derivatives as anticoagulants, analgesics, hypotensives, and diuretics
INVENTOR(S): Kanai, Kenichi; Goto, Kyoto; Hashimoto, Kinji; Tsuda, Yoshiaki
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Factory, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62108859	A2	19870520	JP 1985-250197	19851107 <--
JP 04025947	B4	19920506		
PRIORITY APPLN. INFO.:			JP 1985-250197	19851107

GI



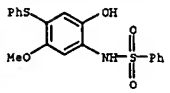
I

AB The title compds. [I; R1 = H, alkyl, (Ph)alkyl, alkylcarbonyl, Ph- or alkylsulfonyl, benzoyl, (benzoyl)aminothiocarbonyl, (substituted) thiazolyl; R2 = alkyl, Ph(alkyl); R3 = alkyl, (Ph)alkyl, carboxyalkyl], useful as antiinflammatories, antiallergics, antirheumatics, analgesics, diuretics, anticoagulants, and hypotensives (no data), are prepared Nitration of 10 g 2,4-(PhS)(MeO)C6H3OMe gave 9.5 g 2,4,5-(O2N)(MeO)(PhS)C6H2OMe, which (6 g) was treated with BBr3 at -20° to afford 5 g 2,4,5-(O2N)(MeO)(PhS)C6H2OH. The nitrophenol (1.6 g) was reduced to give 1.3 g I (R1 = H, R2 = Ph, R3 = Me) isolated as its HCl salt.

IT 110624-62-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as drug)

RN 110624-62-9 CA
CN Benzenesulfonamide, N-[2-hydroxy-5-methoxy-4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)

L12 ANSWER 21 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



L12 ANSWER 22 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 104:168125 CA
TITLE: Substituted bis(4-aminophenyl) sulfones and their therapeutic use
INVENTOR(S): Seydel, Joachim K.; Pieper, Helmut; Krueger, Gerd; Noll, Klaus; Keck, Johannes; Lechner, Uwe
PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Fed. Rep. Ger.
SOURCE: Ger. Offen., 52 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3419009	A1	19851128	DE 1984-3419009	19840522 <--
EP 165422	A1	19851227	EP 1985-105478	19850506 <--
EP 165422	B1	19880309		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 32888	E	19880315	AT 1985-105478	19850506 <--
CA 1315287	A1	19930330	CA 1985-481752	19850517 <--
DK 8502232	A	19851123	DK 1985-2232	19850520 <--
FI 8501996	A	19851126	FI 1985-1996	19850520 <--
ES 543282	A1	19860601	ES 1985-543282	19850520 <--
IL 75238	A1	19890228	IL 1985-75238	19850520 <--
NO 8502026	A	19851125	NO 1985-2026	19850521 <--
NO 160995	B	19890313		
NO 160995	C	19890621		
JP 60255760	A2	19851217	JP 1985-109199	19850521 <--
JP 05037420	B4	19930603		
ZA 8503821	A	19870128	ZA 1985-3821	19850521 <--
AU 8542768	A1	19851128	AU 1985-42768	19850522 <--
AU 572660	B2	19880512		
ES 551832	A1	19870101	ES 1986-551832	19860211 <--
ES 551833	A1	19870101	ES 1986-551833	19860211 <--
ES 551834	A1	19870101	ES 1986-551834	19860211 <--
US 4829058	A	19890509	US 1987-62291	19870615 <--
US 4992430	A	19910212	US 1989-302158	19890126 <--
US 5084449	A	19920128	US 1990-623833	19901207 <--
PRIORITY APPLN. INFO.:			DE 1984-3419009	A 19840522
			EP 1985-105478	A 19850506
			US 1985-732024	A1 19850508
			US 1987-62291	A3 19870615
			US 1989-302158	A2 19890126

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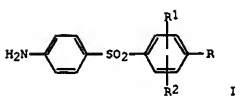


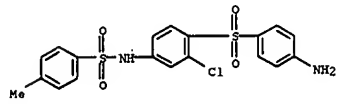
I

AB The title compds. I (R = NH2, alkylamino, dialkylamino; R1 = cyano,

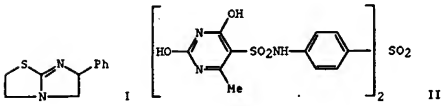
L12 ANSWER 22 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
alkylaminocarbonyl, alkylamino, hydroxyalkyl, etc.; R2 = H, halo, OH, alkoxy, etc.) are prepd. by several methods as drugs for the treatment of malaria and leprosy (formulations given). Thus, I (R = NHMe, R1 = 2-Me, R2 = H) (II) was prepd. by refluxing 4' -acetamino-2-methyl-4-(N-methyltosylamino)diphenyl sulfone (prepd. by methylation of the 4-tosylamino deriv. with MeI) with HBr in the presence of PhOH. II inhibited synthesis of 7,8-dihydropteroic acid by Plasmodium berghei in vitro.

IT 101513-49-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(isopropylation of)

RN 101513-49-9 CA
CN Benzenesulfonamide, N-[4-[(4-aminophenyl)sulfonyl]-3-chlorophenyl]-4-methyl- (9CI) (CA INDEX NAME)

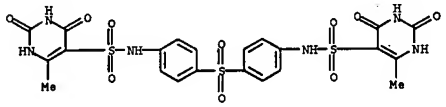


L12 ANSWER 23 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 101:32874 CA
TITLE: Efficacy of therapy with antibacterial drugs in combination with levamisole and diutsifon in experimental degenerative tuberculosis of the lungs
AUTHOR(S): Khomenko, A. G.; Erokhin, V. V.; Insanov, A. B.; El'shanskaya, M. P.; Golyshevskaya, V. I.; Goloshchapov, N. M.
CORPORATE SOURCE: Tsentr. NII Tuberk., Moscow, USSR
SOURCE: Problemy Tuberkuleza (1984), (4), 55-9
CODEN: PRTUAX; ISSN: 0032-9533
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI

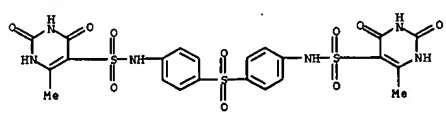


I II

AB The efficacy of therapy of degenerative tuberculosis of the lungs with chemotherapeutic drugs in combination with immunostimulants was studied on the basis of morphol. investigations on rabbits. It was shown that the use of levamisole (I) [14769-73-4] and diutsifon (II) [34941-71-4] in addition to antibacterial drugs at the phase of disease stabilization promoted heating of the degenerative tuberculosis by converting the caverns into cyst-like cavities, formation of tuberculomas, encapsulated caseous foci, and calcinates. Lymphocytes, macrophages and polynuclear cells actively participated in the reparative reactions. Diutsifon was capable of correcting the adverse effects of prednisolone on extended destructive tuberculosis by preventing rapid progress of the disease.
IT 34941-71-4
RL: BIOL (Biological study)
(tuberculostatic activity of antibiotics and)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 24 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 98:166832 CA
TITLE: Determination of surfactant concentration needed for wetting of hydrophobic drugs by critical wetting concentrations
AUTHOR(S): Bondarenko, A. I.
CORPORATE SOURCE: Beloruss. Inst. Usoversh. Vrachei, Minsk, USSR
SOURCE: Farmatsiya (Moscow, Russian Federation) (1983), 32(1), 29-31
CODEN: FRMTAL; ISSN: 0367-3014
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The wettability of Tween 80 [9005-65-6] varied with the type of pharmaceutical and the time of wetting (in min) vs. the surfactant concentration and was represented by a hyperbolic curve. For hydrophilization of diutsifon [34941-71-4] and salazodimethoxine [40016-88-4] the wetting concentration of Tween 80 was .apprx.0.04% and .apprx.0.05%, resp., whereas for other sulfonamides the concentration of the surfactant required for wetting was much higher. For sulfadimezine [57-68-1], salazopyridazine [22933-72-8], and ethazole [94-19-9], the concns. were .apprx.0.09, .apprx.0.1, and .apprx.0.1%, resp. For xeroform [5175-83-7] 1.3% surfactant was required.
IT 34941-71-4
RL: PRP (Properties)
(wettability of, Tween 80 effect on)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 23 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

L12 ANSWER 25 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 92:41976 CA
TITLE: Pharmaceutical composition based on bis[p-(2,4-dioxo-6-methylpyrimidinyl-5-sulfonamido)phenyl] sulfone for treating rheumatoid collagenosis
INVENTOR(S): Goloshchapov, N. M.; Sigidin, Ya. A.; Tsvetkova, E. S.; Bilich, I. L.; Reznik, V. S.; Pashkurov, N. G.; Zaika, G. F.; Muslinkin, A. A.
PATENT ASSIGNEE(S): Pirogov, N. I., Moscow State Medical Institute, USSR; Arbuzov, A. E., Institute of Organic and Physical Chemistry
SOURCE: Fr. Demande, 10 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2408348	A1	19790608	FR 1977-31896	19771024 <--
FR 2408348	B1	19800627		
PRIORITY APPLN. INFO.:			FR 1977-31896 A	19771024

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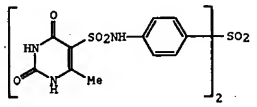
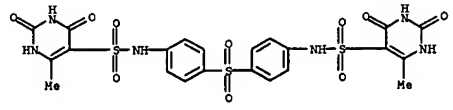


I

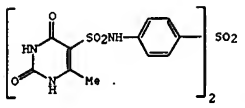
AB The title compound (I) was prepared by treating 6-methyluracil with ClSO2H and treating the 5-sulfonyl chloride with (4-H2NC6H4)2SO2. I decreases early morning stiffness and pain due to arthritis.
IT 34941-71-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, in arthritis treatment)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 26 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 91:44522 CA
TITLE: Medicinal preparation for the treatment of collagenoses of a rheumatoid nature
INVENTOR(S): Goloshchapov, N. M.; Sigidin, Ya. A.; Tsvetkova, E. S.; Bilich, I. L.; Reznik, V. S.; Pashkurov, N. G.; Zaika, G. F.; Muslinkin, A. A.
PATENT ASSIGNEE(S): USSR
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4151281	A	19790424	US 1977-843818	19771020 <--
PRIORITY APPLN. INFO.:			US 1977-843818 A	19771020

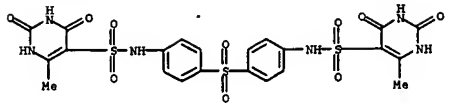
GI



I

AB **Pharmaceuticals** containing I (**34941-71-4**) are used for the treatment of various collagenoses, such as rheumatoid arthritis, systemic scleroderma, etc. I exhibits low toxicity (LD50 2600 mg/kg intragastrally to mice) and low side effects. In clin. tests 59 out of 69 patients exhibited abatement of the severity and duration of morning torpidity after oral administration of 0.1-0.2 g doses of I. The pain syndrome tangibly abated towards the end of the 1st wk of treatment and in 51 patients it disappeared on the 10th-12th day. I was prepared by chlorosulfonation of 6-methyluracil [626-48-2] and treatment of 6-methyluracil-5-sulfonyl chloride [6461-30-9] with (4-H2NC6H4)2SO2 [80-08-0].
IT **34941-71-4P**
RL: PREP (Preparation)
(preparation of, for collagen disease and arthritis treatment)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)

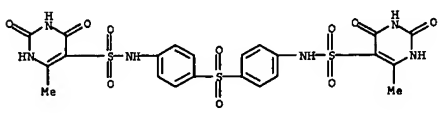
L12 ANSWER 26 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



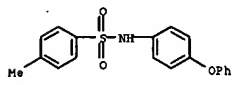
L12 ANSWER 27 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 83:65483 CA
TITLE: Drug for leprosy
INVENTOR(S): Goloshchapov, N. M.; Steklovskii, V. K.; Reznik, V. S.; Pashkurov, N. G.; Muslinkin, A. A.; Borisova, E. N.
PATENT ASSIGNEE(S): Zagorsk Leprosy Clinic, USSR; Arbuzov, A. E., Institute of Organic and Physical Chemistry
SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1975, 52(5), 14-15.
CODEN: URXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 459228	T	19750205	SU 1971-1670131	19710701 <--
PRIORITY APPLN. INFO.:			SU 1971-1670131 A	19710701

GI For diagram(s), see printed CA Issue.
AB P,p'-bis[(2,4-dihydroxy-6-methyl-5-pyrimidinyl)sulfonamino]diphenyl sulfone (I) [**34941-71-4**] is used for treatment of leprosy.
IT **34941-71-4**
RL: BIOL (Biological study)
(leprosy treatment with)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)

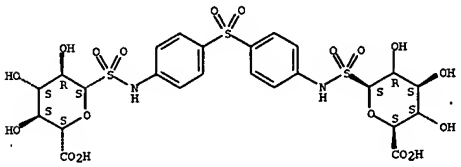


L12 ANSWER 28 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 80:103767 CA
TITLE: Synthesis of new substituted N-(β-hydroxyethyl)anilines and their **pharmacological** properties
AUTHOR(S): Massarani, E.; Nardi, D.; Tajana, A.; Palmeri, C.
CORPORATE SOURCE: Div. Ric., Rocardati S.a.S., Milan, Italy
SOURCE: Bollettino Chimico Farmaceutico (**1973**), 112(6), 455-64
CODEN: BCFAAI; ISSN: 0006-6648
DOCUMENT TYPE: Journal
LANGUAGE: Italian
AB Fifteen title compds. (I; R = H, Cl, Ph, PhCH2CH2, PhO, PhS, PhCH2S, MeS, or cyclohexylthio; R1 = H or Et) were synthesized and tested **pharmacol**. All I had sedative action in mice at subtoxic doses. Anticonvulsant activity was shown only by 4-(phenylthio)-N-(2-hydroxyethyl)aniline (I; R = 4-PhS; R1 = H; II) [51026-08-5] and 4-(phenylthio)-N-(1-ethyl-2-hydroxyethyl)aniline (I; R = 4-PhS; R1 = Et; III) [51026-09-6]. With respect to selective antibacterial action in vitro, none of the compds. had greater activity than that previously found for II. All I in which R1 = H had antiinflammatory activity at 100-200 mg/kg against formalin-induced edema in the rat paw, whereas of the compds. in which R1 = Et, only III had such activity. Various routes for the synthesis of I are described, the most satisfactory of which was reduction of the corresponding Et N-phenylglycinates with LiAlH4; the Et N-phenylglycinates were prepared by condensing the appropriate substituted aniline with BrCH2CO2Et (for I; R = H) or with EtBrCHCO2Et (for I; R = Et).
IT **51170-33-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 51170-33-3 CA
CN Benzenesulfonamide, 4-methyl-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



L12 ANSWER 29 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 76:135483 CA
TITLE: Analytical studies on antileprous drugs. 6. Analysis of sulfone drugs and their metabolites by thin-layer chromatography
AUTHOR(S): Tsutsumi, Sadae; Sakamoto, Yoshiki; Nakamura, Kazunari
CORPORATE SOURCE: Natl. Inst. Lepr. Res., Tokyo, Japan
SOURCE: Repura (1970), 39(1), 17-25
CODEN: REPUAC; ISSN: 0024-1008
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Thin-layer chromatog. is an effective means to sep. and analyze 4,4'-sulfonyldianiline (I) [80-08-0], 4,4'-diaminodiphenyl sulfoxide (II) [119-59-5], 4,4'-diaminodiphenyl sulfide (III) [139-65-1] and their mono-N-acetylates. A sample of human urine was examined after oral administration of II. The metabolites identified were III, III monoacetylate, II monoacetylate, and I. When Promin A [34569-22-7] was injected i.v. into rabbits, the main metabolites found in the urine were I and 4,4'-diaminodiphenyl sulfide mono-N-glucosiduronate [34569-23-8].
IT 34569-22-7
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of)
RN 34569-22-7 CA
CN β-D-Glucopyranuronic acid, 1,1'-[sulfonylbis(4,1-phenyleneiminosulfonyl)]bis[1-deoxy-, tetrasodium salt (9CI) (CA INDEX NAME)

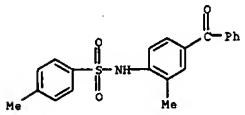
Absolute stereochemistry.



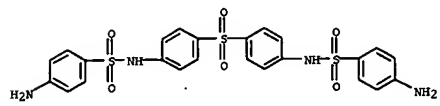
●4 Na

L12 ANSWER 30 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

L12 ANSWER 30 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 74:86060 CA
TITLE: Amides and amines with analgesic and antiinflammatory activity
AUTHOR(S): Artini, D.; Buttinoni, A.; Dradi, E.; Logemann, W.; Mandelli, V.; Melloni, P.; Tommasini, R.; Tosolini, G.; Vita, G.
CORPORATE SOURCE: Carlo Erba Ther. Res. Inst., Milan, Italy
SOURCE: Arzneimittel-Forschung (1971), 21(1), 30-6
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Of the 60 4-amido-benzophenones and 33 4-aminobenzophenones prepared and tested for antiinflammatory activity in the carrageenin test, for analgesic activity in the phenylbenzoquinone test, and for antibradykinin activity and toxicity in mice, 3-methyl-4-(ethoxyacetylamino) benzophenone (I) was the most active with the least toxicity. Its analgesic activity was 5 times that of phenylbutazone and its antiinflammatory and antibradykinin activities were equal to those of phenylbutazone. It had oral LD50 values of 1140 and 2280 mg/kg in mice and rats, resp. and oral subacute toxicity (7-day) in rats was 1040 mg/kg. 3-Methyl-4-aminobenzophenone was the only metabolite found in the urine of rats treated with I. 4-Aminobenzophenone (II) was the most active compound tested, the analgesic and antiinflammatory activities being >7.5- and 2-fold greater than those of phenylbutazone but its proclivity for producing methemoglobin precludes it for therapeutic use. 4-(Ethoxyacetylamino)benzophenone, 2-methyl-4-(ethoxyamino)benzophenone, and 2-methyl-4-aminobenzophenone also increased methemoglobin formation in mice 35-45-fold, whereas I and 3-methyl-4-aminobenzophenone had no effect on its formation. A Me group in the position ortho relative to the amino or amido group is important as regards both activity and side effects, because it prevents methemoglobin formation. The amines were synthesized from primary amines obtained from a Friedel-Crafts condensation in the presence of polyphosphoric acid or reaction of the nitro derivative with phenylacetonitrile followed by oxidation of the resulting oxime with a 30 H202 solution and then selective reduction The amides were obtained by reacting the primary amine with an acid chloride in the presence of a base. Secondary amines were synthesized from primary amines by reacting the Na salts of sulfonamides obtained from p-toluenesulfonyl chloride with suitable alkyl halides followed by saponification in concentrated H2SO4.
IT 31680-64-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 31680-64-5 CA
CN p-Toluenesulfono-o-toluidide, 4'-benzoyl- (8CI) (CA INDEX NAME)



L12 ANSWER 31 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 67:42477 CA
TITLE: A new method for the manufacture of bis(4-amino-phenyl) sulfone and the antileprosy, antituberculosis, and anti-biotic activities of some new derivatives related to this drug
AUTHOR(S): Sah, Peter P. T.; Peoples, S. Anderson; Kwan, S. T.; Sah, Hamilton J.
CORPORATE SOURCE: School of Vet. Med., Univ. of California, Davis, CA, USA
SOURCE: Arzneimittel-Forschung (1967), 17(4), 425-31
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Bis(4-aminophenyl) sulfone was prepared by passing toluene vapor into concentrated H2SO4 in the presence of P2O5 at 180° for 24 hrs. to form 4,4'-dimethyldiphenyl sulfone which was isolated, purified, and oxidized to 4,4'-dicarboxyldiphenyl sulfone with dilute H2SO4 and K2Cr2O7 solns. Esterification of the dicarboxylic acid with absolute MeOH or EtOH yields the dimethyl or diethyl ester which upon amination yields 4,4'-dicarbamoyldiphenyl sulfone which was then degraded to bis(4-aminophenyl) sulfone by the Hofmann degradation. The effectiveness of this compound and 7 related derivs., bis(4-L-ascorbamidophenyl) sulfone, bis(4-sulfanilamidophenyl) sulfone, bis(4-hydrazinophenyl) sulfone, bis(4-D-glucuronolactone hydrazinophenyl) sulfone, plus di-Na bis(4-D-glucuronic acid hydrazonophenyl) sulfone, di-Na bis(4-succinylamidophenyl) sulfone, di-Na bis(4-phthalylamidophenyl) sulfone, and bis[4-(p-ethoxyphenylthiocarbamido)phenyl] sulfone against leprosy, tuberculosis, and other microorganisms was reviewed. 57 references.
IT 14168-07-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 14168-07-1 CA
CN Benzenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[4-amino- (9CI) (CA INDEX NAME)



L12 ANSWER 32 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 55:27710 CA
ORIGINAL REFERENCE NO.: 55:5417b-i,5418a-b
TITLE: Esters and ketones related to diphenylacetic acid
AUTHOR(S): Wolff, Manfred E.; Owings, Franklin F.
CORPORATE SOURCE: Smith, Kline & French Labs., Philadelphia, PA
SOURCE: Journal of Organic Chemistry (1960), 25, 1235-8
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The title compds. were prepared to study their pharmacol. properties. H2SO4 (302 ml.), 71 ml. H2O, 163 ml. AcOH, and 90.6 g. (4-O2NC6H4)2CMeCO2Me (Skerrett and Woodcock, CA 47, 1075c) refluxed and stirred 18 hrs. at 95° gave 71% [4,x-X(Y)C6H3]2CRCOR' (I) (X = O2N, Y = H, R = Me, R' = OH), m. 175-7° (decomposition) (80% AcOH), converted by refluxing 1 hr. with excess SOCl2 into 63% acid chloride, m. 125-6° (C6H6-petr. ether). [4,x-Me(O2N)C6H3]2CMeCO2H [Haiss, Ber. 15, 1474(1882)] (15 g.) in 300 g. SOCl2 heated at 80° until HCl ceased to evolve and evaporated in vacuo gave 57% I (X = Me, Y = O2N, R = Me, R = Me, R = Cl), m. 89-90° (hexane). The appropriate acid chloride (1 mole equivalent) in C6H6 (10% solution) treated with 2 mole equivs. of the requisite alc. gave the following I (X, Y, R, R', % yield, m.p. given): O2N, H, H, OCH2CH2NMe2 (II), 67, 117-19° (decomposition) (C6H6petr. ether); O2N, H, H, OCH2CH2NEt2, 64, - [HCl salt, m. 164-6° (Me2CO-Et2O)]; O2N, H, H, OEt (III), -, 126-8° (EtOH); O2N, H, Me, OCH2CH2NMe2, - [HCl salt m. 222-3° (decomposition) (MeOH-Et2O)]; O2N, H, Me, OCH2CH2NEt2 (IV), 45, - [HCl salt m. 171-2° (iso-PrOH)]; Me, O2N, Me, OCH2CH2NEt2 (V), - [picrate m. 105-7° (EtOH)]; O2N, H, Me, OCHMeCH2NEt2, - [HCl salt m. 185-7° (MeOH-Et2O)]. The appropriate acid chloride (1 mole equivalent) in CH2Cl2 (10% solution) added dropwise to 2 mole equivs. CH2N2 in CH2Cl2, the solution allowed to stand 18 hrs., stirred with excess 58% aqueous HI, the CH2Cl2 layer separated, washed with H2O, 10% aqueous Na2S2O3, and H2O, dried, and evaporated gave by this procedure 77% I (X = O2N, Y = H, R = R' = Me), m. 164-6° (95% EtOH), and 81% I (X = R = R' = Me, Y = O2N) (VI), m. 100-1° (MeOH). VI (1 g.) and 0.6 g. N2H4 in 10 ml. warm absolute EtOH treated portionwise with Raney Ni until frothing ceased, cooled, and the filtered solution evaporated gave 26% I (X = R = R' = Me, Y = O2N), m. 117-18° (C6H6-petr. ether). II, III, and IV in dioxane (10% solns.) hydrogenated over PtO2 gave 67% I (X = H2N, Y = R = H, R' = OCH2CH2NMe2), m. 130-2° (C6H6-petr. ether), I (X = H2N, Y = R = H, R' = OEt), 88-9° (C6H6-petr. ether), and 70% I (X = H2N, Y = H, R = Me, R' = OCH2CH2NEt2), oil, resp. V on reduction gave 35% I (X = R = Me, Y = H2N, R' = OCH2CH2NEt2) HCl salt, m. 195-6° (EtOH-Et2O). To 14.0 g. (4-H2NC6H4)2CHCO2H mono-HCl salt [Heller, Ann. 375, 261(1910)] in 30 ml. 4N aq NaOH was added alternately and dropwise during 30 min. 21.0 g. ClCO2CH2Ph and 30 ml. 4N aqueous NaOH at 5° with stirring, the mixture stirred 2 hrs. and treated with 150 ml. EtOAc and 150 ml. 10% HCl, gave from the organic layer 51% I (X = NHCO2CH2Ph, Y = R = H, R' = OH), m. 159-62°. C5H5N (300 ml.), 38.7 g. (4-H2NC6H4)2CMeAc (VII) di-HCl salt (VIII) (Allen and Corwin, CA 45, 1080e; Bencze and A., CA 52, 1972f),

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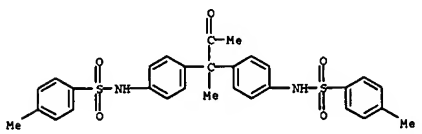
and 57.2 g. p-MeC6H4SO2Cl stirred 45 min. at 27°, the mixt. poured into H2O and extd. with CHCl3 gave 86.6 g. ditosyl deriv. (IX) of VII, m. 75-80°. IX (1 mole equiv.) in EtOH (25% soln.) treated with 3 mole equivs. N NaOH and the appropriate alkyl iodide 3 hrs. at 75° gave 59% I (X = NMeO2SC6H4Me-4, Y = H, R = R' = Me) (X), dimorphic, m. 147-9° (EtOH) and 170-1° (EtOH), and 44% I (X = NEtO2SC6H4Me-4, Y = H, R = R' = Me) (XI), m. 166-7° (EtOH). X and XI in 2 vols. 80% H2SO4 heated 5 min. at 155-60°, the soln. cooled, poured into H2O, and made alk. with 20% aq. NaOH gave 73% I (X = NHMe, Y = H, R = R' = Me) HCl salt, m. 203-4° (EtOH), and 40% I (X = NHEt, Y = H, R = R' = Me), m. 96-7° (EtOH), resp. VIII (16.4 g.) in 25 ml. 37% aq. HCl and 25 ml. H2O treated dropwise at 0° with 7.2 g. NaNO2 in 15 ml. H2O with stirring, the excess HNO2 neutralized with urea, and the soln. treated with 15.2 g. NaBF4 in 30 ml. H2O gave 17.0 g. diazonium fluoborate (XII), m. 139° (decompn.). XII heated with a free yellow flame, the residue dissolved in CHCl3, the soln. washed with 10% aq. NaOH and H2O, dried, and fractionated gave 27% I (X = F, Y = H, R = R' = Me), b0.7 133°.

IT **5112-04-9**, p-Toluenesulfonanilide, 4',4'''-(1-methylacetonylidene)bis-
(preparation of)
RN 5112-04-9 CA
CN p-Toluenesulfonanilide, 4',4'''-(1-methylacetonylidene)bis- (6CI, 8CI) (CA INDEX NAME)



L12 ANSWER 33 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 49:53683 CA
ORIGINAL REFERENCE NO.: 49:10367c-i,10368a
TITLE: Diphenyl sulfones
INVENTOR(S): Pohls, Paul; Behnisch, Robert
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 895600		19531105	DE	<--

AB 4-X1C6H4SO2 C6H4NHR1R2X2 (I), where X1 is NO2, NH2 or acyl-NH, R1 is CO or SO2, R2 an organic radical, and X2 an acid radical (possibly in the form of a water-soluble salt group), and which possess valuable chemotherapeutical properties are prepared by treating a 4'-aminodiphenyl sulfone derivative (II) substituted in the 4-position by NO2 or acyl-NH, with the anhydride, monoester, or monohalide of a polybasic acid or with the anhydride, ester, or halide of an acid containing in addition a substituent (III) replaceable by (or convertible to) an acidic group. III is then replaced by (or converted to) the acid radical, and the NO2 or acyl-NH substituent in the 4-position, possibly converted to NH2. Alternatively the corresponding di-Ph sulfide or sulfoxide derivative is used in the place of II and the sulfide or sulfoxide radicals of the resulting condensation products are oxidized to sulfone groups. [In what follows, the compds. 4-(4-RC6H4SO2)C6H4R' are represented by IA (R, R') with R and R' shown.] A mixture of IA (O2N, NH2) 55.6 g. and succinic anhydride (V) 20 g. in Me2CO 300 cc. refluxed 7 h. with stirring, then cooled with ice, gives IA (O2N, NHCOCH2CH2CO2H) (VI), m. 200°, soluble in warm Na2CO3 solution. Refluxing VI 62 g. in water 400 cc. containing NaHCO3 14 g. with Fe 300 g., glacial AcOH 10 cc., and water 500 cc. 5 h. gives IA (H2N, NHCOCH2CH2CO2H) (VII), m. 153°. Similarly are prepared: IA (O2N, NHCOCH:CHCO2H) (VIII), m. 220°, from IV and maleic anhydride; VII, by reduction of VIII; VI, by oxidation of the sulfide, m. 173° [obtained from 4-(4-O2NC6H4S)C6H4NH2 and V], or of the sulfoxide with H2O2 in AcOH; (IA, Me2CHCH2CONH, NHCOCH2CH2CO2H), m. 184-5°, from IA (Me2CHCH2CONH, NH2) and V; IA (H2NCONH, NHCOCH2CH2CO2H), from IA (H2NCONH, NH2) and V; IA (MeO2CNH, NHCOCH2CH2CO2H), from IA (MeO2CNH, NH2) and V; IA (O2N, NHCOC6H4SO2F-3) (IX), m. 245°, from IV and 3-ClCOC6H4SO2F (X); IA (O2N, NHCOC6H4SO3H-3) (XI), by treating IX with 10% alc. NaOH; IA (O2N, NHSO2C6H4CO2H-3) (XII), from IV and 3-ClO2SC6H4CO2H; water-soluble IA (O2N, NHCOCH2SO3H), from Na2SO3 and IA (O2N, NHCOCH2Cl), m. 184° (prepared from IV and ClCH2COCl); IA (O2N, NHCOC6H4CO2H-2), m. 188°, from IV and o-C6H4(CO2)O; IA [O2N, (carboxypyridyl)ureido], from IV and 2,3-pyridinedicarboxylic anhydride; IA (O2N, carboxy-2,6-dimethylpyridinecarboxamido), from IV and 2,6-dimethyl-3,4-pyridinedicarboxylic anhydride; IA (AcNH, NHCOCH2SO3H), from Na2SO3 and IA (AcNH, NHCOCH2Cl), m. 185-6° [obtained from IA (AcNH, NH2) (XIII) and ClCH2COCl]; IA (AcNH, NHCOCH2CH2CO2H), m. 136-7°, from XIII and V; IA (AcNH, NHCOC6H4CO2H-3), by saponifying the Me ester, m. 262-3° [obtained from XIII and 3-ClCOC6H4CO2Me (XIV), b6.5 126°, which is prepared from SOCl2 and m-HO2CC6H4CO2Me]; IA (AcNH, NHCOCH:CHCO2H), m. 242-3°, from XIII and maleic anhydride IA (AcNH, NHCOC6H4SO2F-3) (XV), m. 250-1°, from XIII and X; IA (AcNH, NHCOC6H4SO3H-3), by saponifying XV; IA (H2N, NHCOCH2SO3H), from Na2SO3 and IA (O2N, NHCOCH2Cl)

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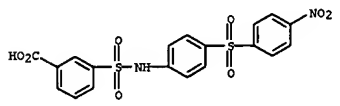
with subsequent redn.; IA (H2N, NHCOC6H4SO3H-3), by redn. of XI; IA (H2N, NHSO2C6H4CO2H-3), by redn. of XII; IA (H2N, NHCOC6H4CO2H-2), by redn. of the corresponding nitro compd.

IT **855198-35-5**, Benzoic acid, m-[[p-(p-nitrophenylsulfonyl)phenyl]sulfamoyl]-
(preparation of)
RN 855198-35-5 CA
CN Benzoic acid, m-[[p-(p-nitrophenylsulfonyl)phenyl]sulfamoyl]- (5CI) (CA INDEX NAME)



L12 ANSWER 34 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 46:48425 CA
ORIGINAL REFERENCE NO.: 46:8035c-i,8036a
TITLE: Benzidine derivatives as chemotherapeutics
AUTHOR(S): Kawai, I. Tomohiko; Ueda, Takeo
CORPORATE SOURCE: Keio-Gijuku Univ.
SOURCE: Yakugaku Zasshi (1951), 71, 1478-81
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Benzidine (I) (3.4 g.) and 9 g. p-AcHNC6H4SO2Cl (II) in 60 ml. Me2CO heated 2 hrs. with 4 g. NaHCO3, on a water bath, filtered, and recrystd. from AcOH give 8.4 g. 4,4'-bis(N4-acetylsulfanilamido)biphenyl (III), m. 276°; 3 g. III in 30 ml. alc. and 10 ml. concentrated HCl heated on a water bath, the HCl salt filtered, treated in aqueous NaHCO3, and recrystd. from Me2CO-MeOH give 1.8 g. 4,4'-bis(sulfanilamido)biphenyl (IV), m. 268°. I (1.8 g.) and 1.8 g. 1,4-AcHNC10H6SOCl2 in in 40 ml. Me2CO refluxed 2 hrs. with 2.1 g., filtered, and washed with water, Me2CO, and MeOH give 4.7 g. 4,4'-bis-(1-acetamido-4-naphthylsulfonamido)biphenyl, m. 254°. I (1.8 g.) and 4.4 g. p-O2NC6H4SO2Cl in 40 ml. Me2CO refluxed 3 hrs. with 2.1 g. NaHCO3, filtered, and recrystd. from MeOH and Me2CO give 4.2 g. 4,4'-bis(p-nitrophenylsulfonamido)biphenyl, m. 298°. Toluidine (2.1 g.) and 4.7 g. II in 60 ml. Me2CO refluxed 2 hrs. with 2.5 g. NaHCO3, filtered, and recrystd. from Me2CO give 4.2 g. 3,3'-di-Me derivative (V) of III; 3,3'-di-Me derivative of IV, m. 232-3°. Dianisidine (3.7 g.) and 7 g. II in 50 ml. Me2CO refluxed 2 hrs. with 3.5 g. NaHCO3 give 6.8 g. 3,3'-di-MeO derivative of III, m. 293°; 3,3'-di-:MeO derivative of IV, m. 253-4°. Dichlorobenzidine (2.5 g.), 4.7 g. II in 40 ml. Me2CO, and 2 g. NaHCO3 refluxed 2 hrs., the solvent removed, and the product recrystd. from MeOH give 4.6 g. 3,3'-di-Cl derivative of III, m. 158-60°. Benzidine sulfone (1.2 g.), 2.4 g. II, 50 ml. Me2CO, and I g. NaHCO3 refluxed 12 hrs., filtered, and the product recrystd. from Me2CO give 0.8 g. 4,4'-bis-(N4-acetylsulfanilamido)diphenyl sulfone, m. 268°. 4-Amino-4'-benzamidobiphenyl (1 g.), 0.8 g. II, 0.5 g. NaHCO3, and 40 ml. Me2CO refluxed 3 hrs., filtered, and the product recrystd. from Me2CO give 0.7 g. 4-(N4-acetylsulfanilamido)-4-benzamidobiphenyl, m. 201°; 4-sulfanilamido-4'-benzamidobiphenyl, m. 310. p-[2,4-O2N(H2N)-C6H3]C6H4NHAc (1.3 g.), 1.1 g. II, 1 g. NaHCO3, and 40 ml. Me2CO refluxed 8 hrs., filtered, and the product recrystd. from Me2CO give 1.3 g. 2-nitro-4-(N4-acetylsulfanilamido)-4'-acetamidobiphenyl (VI), m. 273°; 4-(p-H2NC6H4SO2NH) analog (VII) of VI, m. 252°. p-[2,4-H2N(AcHN)C6H3]C6H4NHAc (1.4 g.), 1.2 g. II, 0.5 g. NaHCO3, and 50 ml. Me2CO refluxed 10 hrs., filtered, and the product recrystd. from MeOH give 1.1 g. 2-(N4-acetylsulfanilamido)-4,4'-diacetamidobiphenyl, m. 275°. I (9 g.), 16 g. p-O2NC6H4COCl, 21 g. K2CO3, and 90 ml. ether refluxed 2 hrs., filtered, and the product washed with alc. and Me2CO give 21 g. 4,4'-bis(p-nitrobenzamido)biphenyl, m. above 330°; 4,4'-bis(p-aminobenzamido)biphenyl, m. 317°. I (2.4 g.), 8 g. p-BzOC6H4SO2Cl in 60 ml. Me2CO and 1.5 g. NaHCO3 refluxed 2 hrs., filtered, and the product recrystd. from Me2CO give 6.3 g. 4,4'-bis(p-benzoxyphenylsulfonamido)biphenyl, m. 238°. I (2.7 g.), 6.6 g. p-EtOC6H4SO2Cl in 100 ml. Me2CO, and 2 g. NaHCO3 refluxed 2 hrs. and the product recrystd. from MeOH and Me2CO give 5.8 g. 4,4'-bis(p-phenetylsulfonamido)biphenyl, m. 234.5°. I (2.7 g.) and 8-1 g. 1,4-EtOC10H6SO2Cl in a similar way give 7.2 g. 4,4'-bis(1-ethoxy-4-naphthylsulfonamido)biphenyl, m. 177°. The antibacterial action of

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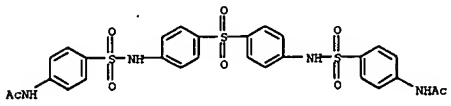
III, VI, and VII equaled that of sulfanilamide and IV was as potent as sulfadiazine.

IT 115166-72-8, Acetanilide, 4',4'''-[sulfonylbis(p-phenyleneiminosulfonyl)]bis-
(preparation of)

RN 115166-72-8 CA
CN Acetamide, N,N'-[sulfonylbis(4,1-phenyleneiminosulfonyl-4,1-phenylene)]bis- (9CI) (CA INDEX NAME)



L12 ANSWER 35 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 41:29770 CA
ORIGINAL REFERENCE NO.: 41:5976e-i,5977a-i,5978a-d
TITLE: Studies in chemotherapy. I
AUTHOR(S): Buu-Hoi, Royer, Rene; Jouin, J. J.; Lecocq, J.; Guettier, D.
SOURCE: Bulletin de la Societe Chimique de France (1947) 128-36
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 41:29770

AB Investigated for their inhibitory effect on tuberculosis bacillus (I) and hemolytic streptococcus (II) and for their general toxicity were various derivs. of dihydrochaulmoogryl alc. (III), PhNHNH2 (IV), homophthalimide, 2,5-dimethylpyrrole, coumarin, indophenazine, sulfanilamide, p-toluenesulfonamide, and β-naphthalenesulfonamide. Also the inhibitory action toward I and pneumococcus of the following are given: PhSEt, p-RC6H4C(:NH)NH2 (R:H, NO2, NH2, MeS, EtS, PrS), and 2,2'-dihydroxy-5,5'-dichlorobenzil. To 6 g. IV in 25 mL. dry xylene was added 3 g. NaNH2. Oleyl bromide (15 g.) was added, the mixture refluxed 3 h., decanted and dried over K. Distillation gave 5 g. of PhN(NH2)C18H35, viscous, pale-yellow oil, b18 310-5°, b2.5 265-70°, very soluble in lipides, much less toxic than IV. Similarly α-chloromethylnaphthalene gave PhN(NH2)CH2C10H7-α, very viscous, pale-yellow oil, b2 225-8° (considerable higher-boiling material also was produced, possibly a disubstituted product), gave a crystalline acetylhydrazide with Ac2O, much less toxic than IV. Tests on tuberculosis in guinea pigs gave no interesting results. Similarly (reaction more difficult) 1-chloromethyl-4-methylnaphthalene gave PhN(NH2)CH2C11H9, very viscous, yellow oil, b3 about 250°. To 40 g. III in 250 mL. dry C6H6 was added 35 g. p-O2NC6H4COCl, and the mixture was heated 3 h. after the first vigorous reaction. The mixture was washed and the C6H6 driven off, leaving a colorless, greasy product, dihydrochaulmoogryl p-nitrobenzoate, decompose on distillation in a high vacuum, strongly inhibitory to I in vitro but inactive in guinea pigs. The p-hydroxybenzoate and p-aminobenzoate of III were prepared and are being tested in vivo. Homophthalic anhydride (2 g.) and 2 g. 2-undecylamine (V) (from the reduction of Me nonyl ketone oxime) were distilled together to give N-2-undecylhomophthalimide, viscous, amber-yellow oil, b15 237-8°, soluble in alkali with a yellow fluorescence (due to enol form), inactive toward II in mice. AcCH2CH2Ac (VI) and V were condensed by the method of Knorr and Paal to give N-2'-undecyl-2, 5-dimethylpyrrole, b13 178-9°. p-tert-Butylaniline and VI gave N-(p-tert-butylphenyl)-2, 5-dimethylpyrrole, b12 167°, m. 83-4°, colorless needles from alc. p-CH3SC6H4NH2 and VI gave N-p-methylmercaptophenyl-2, 5-dimethylpyrrole, m. 60-1° (from alc.), pale rose. VI and m-H2NC6H4NMe2 gave N-m-dimethylaminophenyl-2, 5-dimethylpyrrole, b11 174-5°, m. 37°, colorless needles from aqueous alc. VI and 4-methyl-1-naphthylamine gave N-(4'-methyl-1'-naphthyl)-2, 5-dimethylpyrrole, m. 154°, colorless plates from alc. 1, 5-Naphthalenediamine and VI gave 1, 5-bis (2', 5'-dimethyl-1'-pyrryl)-naphthalene, colorless needles from AmOH, m. 288-9° (rapid heating), sublimes easily on heating. N-o-Chlorophenyl-2, 5-dimethylpyrrole, b15 150°, slight terpene-like odor. Sulfanilamidothiazole and VI gave N-(2, 5-dimethylpyrryl)-p-phenylsulfamidothiazole, decompose 300° without melting. 3, 2-CH2:CHCH2(HO)C6H3CHO, b11 111° (from Claisen rearrangement of o-CH2:CHCH2OC6H4CHO) was condensed with CH2(CO2Et)2 (VII) in piperidine to

L12 ANSWER 35 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
give Et 8-allylcoumarin-3-carboxylate (VIII), colorless needles from alc., m. 86°; LD for a mouse was about 0.20 g. Hydrolysis of VIII gave 8-allylcoumarin-3-carboxylic acid, colorless needles from alc., m. 145-6°. Similarly, 5, 2-Cl(OH)C6H3CHO (IX) and VII gave Et 6-chlorocoumarin-3-carboxylate (X), colorless needles from alc., m. 159°, pale yellow in H2SO4; LD for a mouse was 0.20 g. Hydrolysis of X gave 6-chlorocoumarin-3-carboxylic acid (XI), colorless prismatic needles from alc., m. 193°; Na salt slightly sol. in H2O, sepg. as pearly plates. XI was converted to the acid chloride (colorless solid) by SOCl2 and thence to the amide, m. 207-9° (from alc.). AcCH2CO2Et and IX in piperidine gave 3-acetyl-6-chlorocoumarin, slightly sol. in alc., colorless needles from alc. + C6H6, m. 207° (rapid heating), sublimes easily at 190°, oxime m. 228° (decomp.), o-H2NC6H4COOH was converted to isatin-7-carboxylic acid (XII), m. about 235° (decomp.), by the method of Sandmeyer. XII and o-C6H4(NH2)2 (XIII) in HOAc gave indophenazine-7-carboxylic acid, yellow prisms from pyridine, m. 315°, yellow-brown in H2SO4. Isatin-6-carboxylic acid (XIV) (from m-H2NC6H4COOH) and XIII gave indophenazine-8-carboxylic acid, cryst. from PhNO2, m. about 340° (decomp.), easily sol. in aq. NaOH (red color). Isatin-5-carboxylic acid (from p-H2NC6H4COOH) and XIII gave indophenazine-9-carboxylic acid, solid at 380°, yellow-brown in H2SO4. 1, 2-Naphthalenediamine and XIV gave 1, 2-(or 3, 4)-benzindophenazine-8-carboxylic acid, m. 340° (decomp.), deep-red in H2SO4, yellow Na salt. 2-Aminofluorene and p-AcNHC6H4SO2Cl (XV) in pyridine gave N-acetylsulfanilamido-2-fluorene (XVI), needles from alc. +C6H6, m. 258-9°, inactive toward I or II. Prolonged heating of XVI with a large excess of concd. HCl gave 2-sulfanilamidofluorene, needles from HOAc, m. 229-30°. Similarly 5-aminoacenaphthene and XV gave N-acetylsulfanilamido-5-acenaphthene, plates from C6H6, m. 270°, slightly sol. in alc., dark coloration in H2SO4 which rapidly turned darker. p-CH3SC6H4NH2 and XV gave N-acetylsulfanilamido-4-methylmercaptobenzene (XVII), needles from alc., m. 170°, blue in H2SO4. Boiling of XVII with large excess of concd. HCl gave sulfanilamido-4-methylmercaptobenzene, needles from alc., m. 192.5°, deep-blue in H2SO4, active toward II. 4, 4'-O2NC6H4SC6H4NH2 and XV gave 4(N-acetylsulfanilamido)-4'-nitrodiphenyl sulfide, plates from alc. +C6H6, m. 221°, easily sol. in alk. (red color). 2-Sulfanilamido-4-methylthiazole and XV gave N4-(N-acetylsulfanilyl)sulfanilamido-N1-methylthiazole, needles from HOAc, m. 270-1°. 4-Amino-4'-nitrodiphenyl sulfoxide and XV gave 4-(N-acetylsulfanilamido)-4'-nitrodiphenyl sulfoxide, cryst. from HOAc, m. 262° (decomp.); resists deacetylation by hot HCl. o-Anisidine and XV gave N-acetylsulfanilamido-2-methoxybenzene, plates from alc. +C6H6, m. 204° inactive toward II. m-PhCH2NHC6H4Cl and XV gave N4-acetyl-N1-benzyl-N1-(3-chlorophenyl)sulfanilamide, colorless needles from alc., m. 166°. Benzidine and XV gave 4, 4'-bis(N-acetylsulfanilyl)benzidine, needles from HOAc, m. 274°. p-C6H4(NH2)2 and XV gave p-bis(N-acetylsulfanilamido) benzene (XVIII), colorless needles from HOAc, m. about 305° (decomp.). Product of deacetylation of XVIII, needles from HOAc. The following prepd. from p-CH3C6H4SO2Cl and the appropriate amine: 2-tosylaminofluorene, needles from toluene, m. 155-6°; 5-tosylaminoacenaphthene, plates from HOAc, m. 193°; N4-tosylsulfanilamide, needles from HOAc, m. 186°; N-ethyl-N-tosyl-β-naphthylamine, plates from alc., m. 128°; N-ethyl-N-tosyl-m-chloroaniline, needles from alc., m. 72°; N-tosyl-o-anisidine, plates from alc., m. 126°; N-tosyl-N-benzyl-m-chloroaniline, needles from alc., m. 107°; N-tosyl-o-chloroaniline, leaflets from alc., m. 102°; 4-tosylamino-4'-nitrodiphenylsulfoxide, m. 211° (from HOAc), pale-yellow, green in H2SO4 turning rapidly to brown. The following

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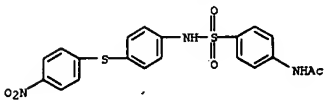
prepd. from β-naphthylsulfonyl chloride and the appropriate amine: N(β-naphthylsulfonyl)-o-anisidine, needles from alc. +C6H6, m. 158°; N4-(β-naphthylsulfonyl)sulfanilamido-N1-2, 4-dimethylpyrimidine, m. 253.5° (from C6H6); N-(β-naphthylsulfonyl)-N-benzyl-m-chloroaniline, fine prismatic needles from alc. +C6H6, m. 132°; 2-(β-naphthylsulfonylamino)fluorene, needles from alc. +C6H6, m. 162°; N4-(β-naphthylsulfonyl)sulfanilamide, m 250° (from C6H6); N-(β-naphthylsulfonyl)-p-nitraniline, yellow prisms from alc. +C6H6, m. 171-2°; N-(β-naphthylsulfonyl)-o-chloroaniline, prisms from alc., m. 115°; N-(β-naphthylsulfonyl)-N-ethyl-o-chloroaniline, failed to cryst.; N-(β-naphthylsulfonyl)-N-ethyl-β-naphthylamine, needles from C6H6, m. 187°.

IT **135209-93-7**, Acetanilide, 4'-[[p-(p-nitrophenylthio)phenyl]sulfamoyl]-
(preparation of)

RN 135209-93-7 CA

CN Acetamide, N-[4-[[[4-[(4-nitrophenyl)thio]phenyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



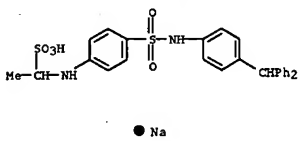
L12 ANSWER 36 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 41:4918 CA
ORIGINAL REFERENCE NO.: 41:1011i,1012a-e
TITLE: Tuberculostatic activity in vitro of twenty-nine different compounds
AUTHOR(S): Frisk, A. Rune
CORPORATE SOURCE: St. Erik's Hosp. and State Bacteriol. Lab., Stockholm
SOURCE: Acta Medica Scandinavica (**1946**), 125, 487-501
CODEN: AMSVAZ; ISSN: 0001-6101
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB An exptl. technique for testing compds. in vitro for tuberculostatic activity against a virulent human tubercle bacilli (AT) strain is described. The effect of the test medium is important because of growth-inhibiting effects from constituents of complex media. The synthetic medium consisted of the following ingredients in parts by weight: asparagine 14, K2HPO4 1.4, sodium citrate 0.9, MgSO4 1.5, ferric citrate 0.3, dextrose 10.00, glycerol 30.0 g., and distilled H2O to 1,000. One mol. of p-H2NC6H4COOH counteracts the bacteriostatic effect of 1,000 mols. of sulfanilamide and about 20 mols. of sulfathiazole. Of 29 compds. investigated for tuberculostatic effect the most active was sulfathiazole. High activity was shown by 2-sulfanilamidonaphthoquinone, 4,4'-diaminodiphenyl sulfone (I), and 4-aminophenyl 2-hydroxy-5-thiazolyl sulfone hydrochloride. Slight activity was shown by sulfapyrimidine, sulfapyridine, sulfanilamide, disodium formaldehydesulfoxylate of I (diasone), N,N'-digalactoside of I (tibatin), [p-(2-amino-5-thiazolylsulfonyl)anilinomethylmercapto]acetic acid. Na 1-[p-(2-amino-5-thiazolylsulfonyl)anilino]ethanesulfonate, 4-aminophenyl 2-amino-4-methyl-5-thiazolyl sulfone dihydrochloride, dihydroxyphenazine di-N-oxide (iodinin), 2-methylquinoxaline di-N-oxide, and-thiouracil. Compds. which showed no activity are 2-sulfanilimido-1-methylpyridine, 4-sulfanilamido-1-hydroxy-2-methylnaphthalene, 2-methyl-1,4-naphthoquinone, 4-sulfanilamidotritane (II), sodium N4-ethanesulfonate of II (Ph2CHC6H4NHSO2C6H4NHCHMeSO3Na), 4-(p-succinylaminobenzenesulfonamido) tritane (HOOCCH2CH2CONHC6H4-SO2NHC6H4CHPh2),N,N'-di(p-benzenesulfonamido-4-trityl) succinamide ([Ph2CHC6H4NHSO2C6H4NHCOCH2]2), 4-aminomethylbenzenesulfonamide, p-aminophenyl 2-amino-5-thiazolyl sulfone (promizole), 4-(2-amino-5-thiazolylsulfonyl) succinanilic acid, urea, thiourea, α-sulfanilylacetophenone, and sulfanilylacetone.

IT **856367-52-7**, Ethanesulfonic acid, 1-[p-[(α,α-diphenyl-p-tolyl)sulfamoyl]anilino]-, sodium salt
(tuberculostatic activity of)

RN 856367-52-7 CA

CN Ethanesulfonic acid, 1-[p-[(α,α-diphenyl-p-tolyl)sulfamoyl]anilino]-, sodium salt (5CI) (CA INDEX NAME)



● Na

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L12 ANSWER 37 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 37:6654 CA
ORIGINAL REFERENCE NO.: 37:1124d-i,1125a-b
TITLE: Chemotherapy of bacterial infections. VI. Synthesis of N1-substituted sulfanilamides: poly- and heterocyclic derivatives
AUTHOR(S): Rajagopalan, S.; Ganapathi, K.
SOURCE: Proceedings - Indian Academy of Sciences, Section A (**1942**), 15A, 432-6
CODEN: PISAA7; ISSN: 0370-0089
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 37:6654

AB cf. C. A. 36, 4102.4. In continuation of the systematic syntheses of N1-substituted derivs. of sulfanilamide, typical representatives of p-H2NC6H4SO2NH (I) derivs. of Ph2O, dibenzofuran, carbazole, acridine, chrysene, coumarin, tetrahydroisoquinoline and phenanthridine have been prepared; if any of them show promise, further elaboration in that group will be made. The ring systems selected are such as either are present in compds. with significant **pharmacol.** activity or may be expected to fill gaps in the data necessary to correlate chemical constitution with chemotherapeutic activity. All but 2 of the compds. described were prepared in the usual way by condensing p-AcNHC6H4SO2Cl with the appropriate cyclic amine and hydrolyzing off the Ac group from the resulting product. Certain amino sulfonamides of pyridine, quinoline, naphthalene and biphenyl have been described in the literature with no information as to their therapeutic activity. As such compds. are of addnl. interest in ascertaining the implications of the Fildes (C. A. 34, 6364.1) and Woods (C. A. 34, 7408.5) theory of the mechanism of the action of sulfonamides, the synthesis of some of them was undertaken. 2-PhC6H4NHAc with ClSO3H gave a sulfonyl chloride which with NH3 yielded a product, m. 195-8°, hydrolyzed by boiling NaOH to a compound (II) provisionally designated as 2-aminobiphenyl-5(?)-sulfonamide. The starting amines were in most cases prepared by methods recorded in the literature; the following are either new or were prepared by improved methods. p-AcNHC6H4OPh (15 g. from 19.4 g. p-MeC(:NOH)C6H4OPh in 130 cc. AcOH and 100 cc. Ac2O saturated at 0° with a slow stream of HCl (8 h.) and allowed to stand overnight), m. 130°; 15 g. boiled 2 h. in 200 cc. of 6 N HCl gave p-PhOC6H4NH2.HCl, m. 225-7° (decomposition). Dibenzofuran (22 g. from 30 g. (o-HOC6H4)2 and 110 g. freshly fused ZnCl2 heated 4 h. at 230-50° and poured while still warm into dilute HCl; (cf. Kraemer and Weissgerber, Ber. 34, 1662 (1901)), m. 83-4°. N-(p-Nitrobenzoyl)homoveratrylamine, from (MeO)2C6H3CH2-CH2NH2 and O2NC6H4COCl, faintly yellow plates from alc., m. 149°; 8.7 g. gently refluxed 1.5 h. with 18 cc. POCl3 and then decomposed with water, gave 7.0 g. 1-(p-nitrophenyl)-3,4-dihydro-6,7-dimethoxyisoquinoline, silky needles from alc., m. 158-9°, 6 g. of which with 50 g. Zn dust and 500 cc. dilute H2SO4 (1:3) heated 3 h. on the water bath yielded 5.1 g. 1-(p-aminophenyl)-1,2,3,4-tetrahydro-6,7-dimethoxyisoquinoline, needles from water, m. 151-3°. In the following R = I and R' = p-AcNH-C6H4SO2NH; the temps. are the m. ps. of the products; 2-R-di-Ph ether, 149° (R', 162°); 4-R-di-Ph ether, 177-8° (R', 183°); 3-R-phenanthrene, 213-15° (R', 244-5°); 6-R-chrysene, 265°; 2-R-dibenzofuran, 242-3°; 3-R-carbazole, 251° (decomposition); 9-R-carbazole, 224° (decomposition) (R', 202-3° (decomposition)); 6-R-coumarin, 189-90°; 9-R-acridine-2HCl, ~ (9-R'-acridine, 273-5° (decomposition)); 1-(p-R-phenyl)-1,2,3,4-tetrahydro-6,7-dimethoxyisoquinoline, 162° (sinters 159°); 9-(m-R-phenyl)-phenanthridine, 251-3° (decomposition) (sinters 246°); II, 186°; 4-

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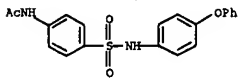
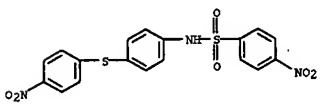
aminonaphthalenesulfonamide, 250-1° (decompn.). These compds. are being tested in exptl. plague, β-hemolytic streptococcal and pneumococcal (type I) infections in mice.
IT 315248-48-7, Acetanilide, p-[4-phenoxyphenylsulfamyl]-
(preparation of)
RN 315248-48-7 CA
CN Acetamide, N-[4-[[(4-phenoxyphenyl)amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 38 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 36:26808 CA
ORIGINAL REFERENCE NO.: 36:4103a-i,4104a-e
TITLE: Antibacterial substances allied to sulfanilamide
AUTHOR(S): Dewing, T.; Gray, W. H.; Platt, B. C.; Stephenson, D.
SOURCE: Journal of the Chemical Society, Abstracts (1942) 239-44
CODEN: JCSAA2; ISSN: 0590-9791
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB Shaking 30 g. p-H2NC6H4SO2NH2 in 150 cc. 2.5 N NaOH with 25 cc. BzCl gives a mixture of the N4-Bz derivative, m. 284° (from 16 parts C5H5N), and the N1,N4-di-Bz derivative, m. 268-70° (from 30 parts each of EtOH and H2O); the latter is more conveniently prepared from the components in C5H5N; both form sparingly soluble Na salts. The following 3 amides were prepared by warming on a water bath for 1 hr. p-AcNHC6H4SO2NH2 and the acid chloride in C5H5N, followed by refluxing with N NaOH for 1 hr.: sulfanilylmyristamide, m. 126°; the adipamide (from ClCO(CH2)4CO2Et), m. 178°, and the chaulmoogramide, m. 80-90° (dihydro derivative, m. 78-80°). Ethyleneguanidine-HBr (34 g.) in 240 cc. 10% Na2CO3, treated slowly with 49 g. p-AcNHC6H4SO2Cl (I) in 400 cc. Me2CO, gives 27 g. of the Ac derivative, m. 245°; refluxing 32 g. with 200 cc. 6 N HCl for 1 hr. and addition of NH4OH give 4 g. disulfanilylethyleneguanidine, m. 178-80° (decomposition); it is insol. in alkali and probably has the structure H2NC6H4SO2N.(CH2)2.N(SO2C6H4NH2).C:NH. Glutamic acid (10 g.) and 16 g. I give 8 g. of a product, m. 142° (decomposition); hydrolysis with 6 N HCl (refluxing 0.5 hr.) gives sulfanilylglutamic acid, m. 192-4°; the di-Na salt is amorphous and very soluble in H2O. BrCH2CH2NH2.HBr and I in aqueous Na2CO3 give a precipitate m. 161-4°, hydrolysis of which yields a product m. 69-70°; refluxing with C5H5N in EtOH gives sulfanilylaminoethylpyridinium bromide, m. 218°. Sulfanilylglycine (m. 154°) and BzH in EtOH, refluxed 1 hr., give 4-benzylideneaminophenylsulfonylglycine, m. 185-6°. 2-Acetoxymercuri-3-hydroxybenzaldehyde and p-H2NC6H4SO2NH2 in AcOH-EtOH on refluxing give (2-acetoxymercuri-3-hydroxybenzylidene)sulfanilamide, yellow, m. 282°. 8-Hydroxyquinoline (44 g.) and 13.3 g. KOH at 180°, treated with 26.2 g. p-ClC6H4NO2 in 2 portions with heating for 1.5 hrs., give 8.4 g. of 8-quinolyl p-nitrophenyl ether, m. 170°. p-O2NC6H4OPh (7.2 g.), added in small portions to 11 cc. ClSO3H at 10°, the reaction mixture poured onto ice, extracted with ether and the extract shaken with 15% NH4OH, gives 5.4 g. of 4-p-nitrophenoxybenzenesulfonamide, m. 129°; on heating the ClSO3H solution to 95° for 2 hrs. and treating as above there results p-nitrophenoxybenzenedisulfonamide, m. 270° (small yield). (4-H2NC6H4)2SO2 (2.5 g.) and 3.7 g. p-O2NC6H4COCl in C5H5N give 3 g. of 4,4'-bis(p-nitrobenzamido)diphenyl sulfone, m. 346°. d-Glutamic acid (II) (19.6 g.) and 69.8 cc. m-MeC6H4NH2, heated for 24 hrs. at 160-70°, give 17 g. of 2-pyrrolidone-5-carboxy-m-toluide (III), m. 147°; addition of 10.9 g. of III in portions to 19.4 cc. ClSO3H and heating 3 hrs. at 50-60°, followed by treatment with concentrated NH4OH, give 4 g. of 1-(2-pyrrolidone-5-carboxamino)-3-methylbenzene-4-sulfonamide, m. 222°. II (25.2 g.), and 115.2 g. 1-C10H7NH2, heated at 185-90° for 3 hrs., give 19.2 g. of 2-pyrrolidone-5-carboxy-1-naphthalide, m. 207°; in another experiment, after addnl. heating for 8 hrs. at 210°, an isomer, m. 224°, was

L12 ANSWER 38 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
isolated; these could not be converted into sulfonyl chlorides. Heating 25 g. II and 111 g. p-O2NC6H4NH2 at 160° for 5 hrs. gives 15.6 g. of 2-pyrrolidone-5-carboxy-p-nitroanilide, yellow, m. 225°. 1-2-Pyrrolidone-5-carboxanilide (3 g.) and 5.2 cc. ClSO3H, heated 3 hrs. at 60-70°, give a product m. 173° (decompn.); heating with 2-aminopyridine in dioxane at 95° for 15 min. gives 0.9 g. of 2-[p-(2-pyrrolidone-5-carboxamido)-phenylsulfonamido]pyridine, m. 273°. (4-H2NC6H4)2SO2 (4.61 g.), diazotized in 17% HCl at -7° and coupled with 2-C10H7OH, gives 7.6 g. of diphenyl-sulfone-4,4'-bisazo-2-naphthol (IV), scarlet, m. 304°; Na salicylate gives the 4,4'-bisazosalicylic acid (V), m. 316° (decompn.). Di-2-pyridyl sulfide di-HBr, m. 274°; oxidation of 1 g. with K2Cr2O7 in AcOH-H2SO4 gives 2,2'-dipyridyl sulfone, m. 216°. Quininic acid (4.3 g.), heated at 100° for 1 hr. with SOCl2 and the product treated with p-H2NC6H4SO2NH2 in C5H5N at 110° for 1 hr., gives 3.8 g. of N4-quininoylsulfanilamide, m. 255°. Antipyrine (10 g.) and 19.4 cc. ClSO3H at -15°, heated at 90° for 1.5 hr. and the resulting product treated with concd. NH4OH, give 3.6 g. of 1-phenyl-2,3-dimethyl-5-pyrazolone-4-sulfonamide, m. 239°; in an attempt to prep. the corresponding sulfinic acid, oxidation gives the sulfonic acid, C11H12O4N2S, analyzed as the Na salt. Dihydrochaulmoogric acid, heated with SOCl2 at 90° for 2.5 hrs., the chloride heated on the steam bath with p-H2NC6H4SO2NH2 in C5H5N for 2 hrs. and the resulting solid (7.1 g.) extd. with C6H6, the insol. paste extd. with Me2CO, the filtrate treated with an equal vol. of ether, shaken with charcoal and the latter extd. with EtOH, gives N4-dihydrochaulmoogrylsulfanilamide, m. 208°. NaHSO3 (10.6 g.) in 29 cc. H2O, treated at 80° with 7 cc. formalin and 9.6 g. 2-aminopyridine, gives 11.2 g. of Na 2-aminopyridine-N-methylenebisulfite, with 1.5 moles H2O, m. 282° (decompn.). p-O2NC6H4SOCl (from 6.3 g. acid), treated with 15 cc. EtOH contg. 3.9 cc. of N2H4.H2O, gives 3.4 g. of Et p-nitrobenzenesulfinate, pale yellow, m. 49-51°; Me ester, m. 47°. p-O2NC6H4SCl and ether-NH3 give p-nitrobenzenesulfenamide, yellow, m. 101-3°. p-O2NC6H4NH2 and p-O2NC6H4SO2Cl in C5H5N, heated for 2 hrs. on the water bath, give 4-nitrobenzenesulfono-4'-nitroanilide, yellow, m. 171-3°; 4-O2NC6H4SC6H4NH2-4 gives 4-(p-nitrophenylsulfonamido)-4'-nitrodiphenyl sulfide, pale yellow, m. 190°. Excluding V, none of the 26 substances was sufficiently promising in bacteriol. tests to be worth detailed pharmacol. investigation; IV is inactive, whereas V retains the action of p-H2NC6H4SO2NH2 on the streptococcus and is also as active as sulfapyridine against the pneumococcus. Substitution in the N4-position of an acyl group or an arylidene group for H led to a decrease in, or disappearance of, activity even when the substituent was a mercurated org. radical known to show marked bactericidal action. Substitution in position N1, on the contrary, causes no diminution in activity so long as a simple monocarboxylic acid residue is the substituent and such substitution is even sufficient to neutralize the disadvantageous effect of acyl substitution in position N4. With a dicarboxylic acid, 1 CO2H group being left free, activity is much reduced and when both are left free, the product is inactive.
IT 28829-78-9, Benzenesulfonanilide, 4-nitro-4'-(p-nitrophenylmercapto)-
(preparation of)
RN 28829-78-9 CA
CN Benzenesulfonanilide, 4-nitro-4'-[(p-nitrophenyl)thio]- (8CI) (CA INDEX NAME)

L12 ANSWER 38 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

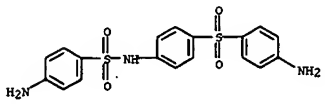


L12 ANSWER 39 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 35:37627 CA
ORIGINAL REFERENCE NO.: 35:5871c-i
TITLE: Chemotherapy. III. Sulfones
AUTHOR(S): Roblin, Richard O., Jr.; Williams, James H.; Anderson, George W.
SOURCE: Journal of the American Chemical Society (1941), 63, 1930-4
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C. A. 34, 6630.6. (The maximum blood levels (m. b. l.) below are in mg./100 cc. for white mice with a dosage of 0.5 g./kg. body weight orally unless otherwise stated.) 4-O2NC6H4Br, 4-AcNHC6H4SO2H and AcOK in cyclohexanol, followed by reduction, give 50% of 4-acetamido-4'-aminodiphenyl sulfone (Raiziss, et al., C. A. 34, 393.9), m. 242-3° (m. ps. corrected), solubility in H2O at 37° 7.1 mg./100 cc., m. b. l. 6.8 (white mice, 0.125 g./kg.), chemotherapeutically active against exptl. streptococcal or pneumococcal infection or both in white mice; hydrolysis gives 4,4'-diaminodiphenyl sulfone (I), m. 175°, solubility 36.9 mg., m. b. l. 3.6 (0.063 g./kg.), active. Condensation of I with octanesulfonyl chloride in C5H5N and hydrolysis give 75% of octylsulfonamido-4'-aminodiphenyl sulfone, m. 130°, solubility 0.1 mg., m. b. l. 0.5, inactive; I and AcNHC6H4SO2Cl in C5H5N give 35% of 4-sulfanilamido-4'-aminodiphenyl sulfone, m. 211°, solubility 2.6 mg., m. b. l. 1.5, active. 2,5-Cl(O2N)C6H3SO2NH2 and 4-AcNHC6H4SO2K (II) in 95% EtOH, followed by reduction and hydrolysis, give 60% of 2-sulfamyl-4,4'-diaminodiphenyl sulfone, m. 238°, solubility 10.4 mg., m. b. l. 3, active. 2,5-Cl(O2N)C6H3CO2Et and II in absolute EtOH, followed by reduction and hydrolysis, give 59% of 2-carbethoxy-4,4'-diaminodiphenyl sulfone, m. 182-3°, solubility 6.5 mg., m. b. l. 1, inactive; the free acid, with 1.5 moles of EtOH of crystallization, m. 108-13°, solubility 422.5 mg., m. b. l. 0.8, inactive. 2-O2NC6H4Br, 4-AcNHC6H4SO2H and AcOK in cellosolve, followed by reduction and hydrolysis, give 83% of 2,4'-diaminodiphenyl sulfone, m. 117°, solubility 19.5 mg., m. b. l. 9.9, inactive. 4,3-Br(O2N)C6H3SO2NH2 and II in absolute EtOH, followed by hydrolysis, give 95% of 4-sulfamyl-2-nitro-4'-aminodiphenyl sulfone, m. 223-5°, solubility 3.1 mg., m. b. l. 3.5 (subcutaneous), slightly active; reduction gives the corresponding 2,4'-diamino derivative, m. 206-7°, solubility 10.7 mg., m. b. l. 5.8 (subcutaneous), inactive. 4-O2NC6H4Cl and PhSO2K in carbitol, followed by reduction, give 46% of 4-aminodiphenyl sulfone, m. 176°, solubility 8.8 mg., m. b. l. 5.2 (0.25 g./kg.), slightly active. 2-Bromopyridine and II in carbitol, with hydrolysis with 12% HCl, give 66% of 4-aminophenyl 2-pyridyl sulfone, m. 158-60°, solubility 72.8 mg., m. b. l. 12.7, active; 4-chloropyridine and II in H2O, followed by hydrolysis, give 53% of the 4-pyridyl isomer, m. 269-71°, solubility 3 mg., m. b. l. 2.1, inactive. 2-Bromothiazole and II in carbitol with subsequent hydrolysis give 63% of 4-aminophenyl 2-thiazyl sulfone, m. 149-51°, solubility 30.1 mg., m. b. l. 10, inactive. 2-Chloro-5-nitropyridine and II in absolute EtOH, followed by hydrolysis, give 85% of 4-aminophenyl 5-nitro-2-pyridyl sulfone, m. 169-71°, solubility 11.4 mg., m. b. l. 2.9, slightly active; reduction gives the 5-amino derivative, m. 186-7°, solubility 123 mg., m. b. l. 9.1, active. The pharmacol. properties of some of the compds. are discussed.

IT 84907-42-6, Sulfanilanilide, 4'-sulfanilyl-

L12 ANSWER 39 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
(prepn. of)
RN 84907-42-6 CA
CN Benzenesulfonamide, 4-amino-N-[4-[(4-aminophenyl)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



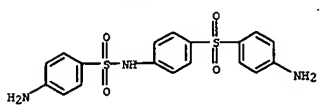
L12 ANSWER 40 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 35:33568 CA
ORIGINAL REFERENCE NO.: 35:5258d-f
TITLE: Aminophenyl sulfonamidophenyl sulfones
INVENTOR(S): Williams, James H.
PATENT ASSIGNEE(S): American Cyanamid Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 2240383		19410429	US		<--

GI For diagram(s), see printed CA Issue.

AB Compds. of the general formula in which R is an alkyl or aryl radical, X is H, NH4 or a metal and n is a small whole number, may be prepared in good yield by the reaction of p-acylaminophenyl p-aminophenyl sulfones with alkyl, aryl or heterocyclic sulfonyl chlorides, followed by deacylation. These compds. are the S analogs of monoacylated diaminodiphenyl sulfones which have high therapeutic activity against various bacterial infections such as those due to pneumococci, streptococci, and the like and are much less toxic than the monoacylated diaminodiphenyl sulfones. Details are given of the preparation of p-aminophenyl p-octylsulfonamidophenyl sulfone, m. 130°, and p-aminophenyl p-sulfanilamidophenyl sulfone, m. 211°.

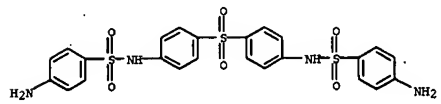
IT 84907-42-6, Sulfanilanilide, 4'-sulfanilyl-
(preparation of)
RN 84907-42-6 CA
CN Benzenesulfonamide, 4-amino-N-[4-[(4-aminophenyl)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 41 OF 41 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 32:66213 CA
ORIGINAL REFERENCE NO.: 32:9299e-f
TITLE: A pharmacological study of factors influencing the isolated melanophores of Fundulus heteroclitus
AUTHOR(S): Bogdanovitch, Sinisha B.
SOURCE: Archives Internationales de Pharmacodynamie et de Therapie (1938), 59, 227-31
CODEN: AIPTAK; ISSN: 0003-9780
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The melanophores of Fundulus heteroclitus are expanded by atropine, pilocarpine and physostigmine, and contracted by adrenaline, acetylcholine, mecholyl and deuterium oxide. With various combinations of these drugs, results were obtained suggesting that more than one nervous mechanism is involved. Adrenergic and cholinergic action, though both cause contraction, can be differentiated by ergotoxine and atropine.

IT 14168-07-1, Sulfanilanilide, 4',4'''-sulfonylbis-
(preparation of)
RN 14168-07-1 CA
CN Benzenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[4-amino- (9CI) (CA INDEX NAME)



10/810,325

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=> s l5 not l12
L13         362 L5 NOT L12

=> d l13 ibib abs fhitstr 1-40
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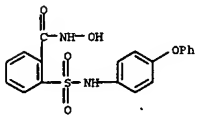
L13 ANSWER 1 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 138:304308 CA
TITLE: Preparation of sulfonyl aryl hydroxamates and their use as matrix metalloprotease inhibitors
INVENTOR(S): Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Decrescenzo, Gary A.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Mischke, Brent V.; Rao, Shashidhar N.; Villamil, Clara I.
PATENT ASSIGNEE(S): Pharmacia Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 148 pp., Cont.-in-part of U.S. Ser. No. 569,034.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003073845	A1	20030417	US 2001-909227	20010719
US 6696449	B2	20040224		
WO 9838859	A1	19980911	WO 1998-US4300	19980304 <--
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GH, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 2001020021	A1	20010906	US 1999-230209	19990624
US 6380258	B2	20020430		
US 2003191317	A1	20031009	US 2000-728408	20001201
US 6794511	B2	20040921		
CA 2453613	AA	20030130	CA 2002-2453613	20020719
WO 2003007954	A2	20030130	WO 2002-US23219	20020719
WO 2003007954	A3	20031023		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1406626	A2	20040414	EP 2002-761148	20020719
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002011430	A	20040713	BR 2002-11430	20020719
JP 2005502632	T2	20050127	JP 2003-513561	20020719
PRIORITY APPLN. INFO.:			US 1997-35182P	P 19970304
			WO 1998-US4300	W 19980304
			US 1999-310813	B1 19990512
			US 1999-310813	B2 19990512
			US 1999-230209	A2 19990624
			US 2000-569034	A2 20000511

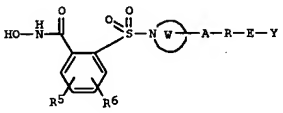
L13 ANSWER 1 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



L13 ANSWER 1 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

	US 2000-728408	A2	20001201
	US 2001-909227	A	20010719
	WO 2002-US23219	W	20020719

OTHER SOURCE(S): MARPAT 138:304308
GI



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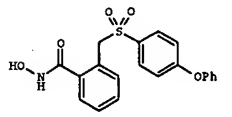


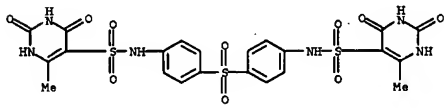
II

AB Title compds. I [W = 6-membered heterocycle containing the sulfonyl bonded N; A-R-E-Y = 4-substituent; A = O, SO0-2, etc.; R = alkyl, alkoxyalkyl, aryl, heteroaryl, cycloalkyl, etc.; E = absent , bond, CO, SO2, etc.; Y = absent, H, OH, CN, NO2, alkyl, haloalkyl, aminoalkyl; R5-6 = together with the atoms to which they are bonded, form an aliphatic or aromatic carbocyclic or heterocyclic ring having 5-7 members] are prepared Over 50 synthetic examples are disclosed. For example, phthalide is reacted with 4-(phenoxy)benzenethiol (DMF, K2CO3, 100°C, 2 h) and the resulting product converted to the hydroxamic acid (CH2Cl2, ClCOCOCl, DMF (cat), TMSONH2, 0°C, 1.5 h) followed by oxidation (CH2Cl2, mCPBA, room temperature, 3 h) to II. II has IC50 = 10 nM for MMP-2, 45 nM for MMP-13 and >10,000 nM for MMP-1. I are inhibitors of MMP and angiogenesis.
IT 308385-50-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of sulfonyl aryl or heteroaryl hydroxamic acids and derivs. as aggrecanase inhibitors)
RN 308385-50-4 CA
CN Benzamide, N-hydroxy-2-[[(4-phenoxyphenyl)amino]sulfonyl]- (9CI) (CA INDEX NAME)

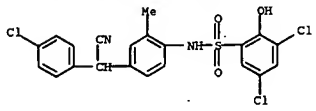
L13 ANSWER 2 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 133:291134 CA
TITLE: Diutsifon for treating systemic scleroderma
INVENTOR(S): Nikonova, L. V.; Reznik, V. S.
PATENT ASSIGNEE(S): Kazanskii Meditsinskii Universitet, Russia
SOURCE: Russ. From: Izobreteniya 1998, (2), 180.
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2102091	C1	19980120	RU 1995-116472	19950919 <--
PRIORITY APPLN. INFO.:			RU 1995-116472	19950919

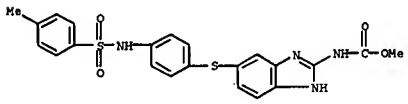
AB Title only translated.
IT 34941-71-4, Diutsifon
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Diutsifon for treating systemic scleroderma)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



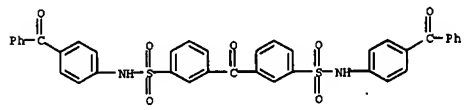
L13 ANSWER 3 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:146184 CA
TITLE: Synthesis of hydroxybenzenesulfonanilides against parasite Fasciola hepatica and their uncoupling activity for oxidative phosphorylation in rat liver mitochondria
AUTHOR(S): Wang, Xiaojing; Chen, Jing; Zhao, Jun; Li, Zhe; Xin, Min
CORPORATE SOURCE: Department of Chemistry, Neimonggol University, Hohhot, 010021, Peop. Rep. China
SOURCE: Huaxue Yanjiu Yu Yingyong (1999), 11(4), 422-424
CODEN: HYYIFM; ISSN: 1004-1656
PUBLISHER: Huaxue Yanjiu Yu Yingyong Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The 8 substituted hydroxybenzenesulfonanilides were synthesized. The decoupling action of these compds. for oxidative phosphorylation in rat liver mitochondria were studied. The decoupling activities were measured by measuring stimulation of state 4 respiration and measuring the increase of Pi in reaction medium.
IT **258263-21-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of hydroxybenzenesulfonanilides against parasite Fasciola hepatica and their uncoupling activity for oxidative phosphorylation in rat liver mitochondria)
RN 258263-21-7 CA
CN Benzenesulfonamide, 3,5-dichloro-N-[4-[(4-chlorophenyl)cyanomethyl]-2-methylphenyl]-2-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 4 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:133340 CA
TITLE: Approach to predicting the toxicity of chemical substances
AUTHOR(S): Zul'karnaev, T. R.; Tyurina, L. A.; Solominova, T. S.; Novikov, S. M.; Kosheleva, O. M.; Kirlan, S. A.
CORPORATE SOURCE: Bashkirskii Gos. Med. Univ., Ufa, Russia
SOURCE: Gigiena i Sanitariya (1999), (3), 54-61
CODEN: GISAAA; ISSN: 0016-9900
PUBLISHER: Meditsina
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB A method is proposed for predicting acute toxicity of chemical compds. which is based on the complex hierarchic dichotomous model; examples are given of its application. The proposed approach is related to acute toxicity, directed to LD50 values. Seven models were incorporated for sequential toxicol. classification of materials.
IT **256921-80-9**
RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
(approach to predicting toxicity of chemical substances)
RN 256921-80-9 CA
CN Carbamic acid, [5-[[4-[[(4-methylphenyl)sulfonyl]amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 5 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:122340 CA
TITLE: Synthesis and biological screening of some novel sulfonamides and arylsulfonates
AUTHOR(S): Bhatt, Akhil H.; Parekh, H. H.; Parikh, A. R.
CORPORATE SOURCE: Chemistry Department, Saurashtra University, Rajkot, 360005, India
SOURCE: Journal of the Institution of Chemists (India) (1999), 71(1), 21-23
CODEN: JOICA7; ISSN: 0020-3254
PUBLISHER: Institution of Chemists (India)
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Some new sulfonamides and arylsulfonates have been prepared The products were screened for their antimicrobial and antimycobacterial activity. All the compds. showed moderate activity.
IT **256382-92-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antibacterial and antimycobacterial activity of sulfonamides and arylsulfonates)
RN 256382-92-0 CA
CN Benzenesulfonamide, 3,3'-carbonylbis[N-(4-benzoylphenyl)- (9CI) (CA INDEX NAME)



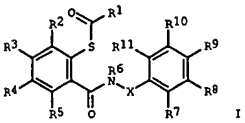
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:49889 CA
TITLE: Preparation of benzamide thiolesters, disulfides, benzisothiazolones, and related compounds as inactivators of zinc finger containing retroviruses.
INVENTOR(S): Turpin, Jim A.; Song, Yongsheng; Inman, John K.; Huang, Mingjun; Wallqvist, Anders; Maynard, Andrew; Covell, David G.; Rice, William G.; Appella, Ettore
PATENT ASSIGNEE(S): United States of America, Department of Health and Human Services, USA
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965871	A2	19991223	WO 1999-US13856	19990618 <--
WO 9965871	A3	20001123		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2335464	AA	19991223	CA 1999-2335464	19990618 <--
AU 9946972	A1	20000105	AU 1999-46972	19990618
AU 763729	B2	20030731		
BR 9911385	A	20010313	BR 1999-11385	19990618
EP 1087941	A2	20010404	EP 1999-930428	19990618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002518370	T2	20020625	JP 2000-554698	19990618
US 6706729	B1	20040316	US 2001-701451	20010516
US 2004132785	A1	20040708	US 2003-738062	20031216
PRIORITY APPLN. INFO.:			US 1998-89842P P	19980619
			WO 1999-US13856 W	19990618
			US 2001-701451 A1	20010516

OTHER SOURCE(S): MARPAT 132:49889
GI

L13 ANSWER 6 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



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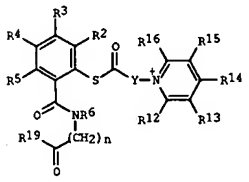


II

AB Title compds., e.g., [I, II; X = null, alkyl, (substituted) aryl; R1 = YZ, (substituted) alkyl, aryl, aralkoxy, etc.; Y = (CH2)m, C6H4CH2, C6H4NHCOCH2, CH2NHCOCH2, etc.; Z = dialkyl- or aryl- or alkylarylsulfonium, trialkyl- or aryl-, or alkylarylammonium, etc.; R2 = H, Me, CONH2, CO2Me; R3-R5 = H, halo, NO2, CO2Me, CO2NH2; R6 = H, Me, (substituted) alkyl, aryl, aralkyl; R7-R11 = H, except that either R7, R8, or R9 can = SO2G; G = NH2, alkylimino, arylimino, acylimino, nitroaryl, arylaminoalkyl, etc.; R12-R16 = H, (substituted) CONH2; R19 = OH, (substituted) NH2, ester group], were prepared Thus, N-[2-(5-pyridiniovalerоylthio)benzoyl]-3-aminopropionamide bromide was prepared in several steps from 2,2'-dithiobenzoyl chloride and β-alaninamide hydrochloride. Pyridinioalkyl thioesters did not inhibit HIV-1 integrase, reverse transcriptase, or protease but did promote Zn ejection from NCp7 protein.

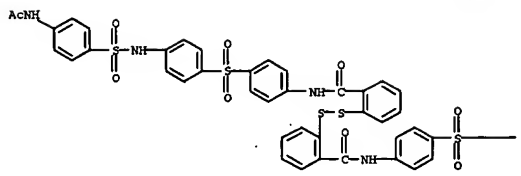
IT **221119-80-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of benzamide thiolesters, disulfides, benzisothiazolones, and related compds. as inactivators of zinc finger containing retroviruses)

RN 221119-80-8 CA

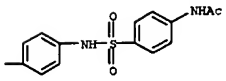
CN Benzamide, 2,2'-dithiobis[N-[4-[[4-[[[4-(acetylamino)phenyl]sulfonyl]amino]phenyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 6 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



L13 ANSWER 7 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 132:42829 CA

TITLE: Positively-working photosensitive polyimide precursor composition and formation of relief pattern using the composition

INVENTOR(S): Okaba, Kaori; Fujieda, Nagatoshi

PATENT ASSIGNEE(S): Hitachi Chemical Du Pont Micro System Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11338143	A2	19991210	JP 1998-139626	19980521 <--
PRIORITY APPLN. INFO.:			JP 1998-139626	19980521

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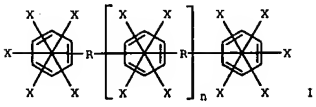


I

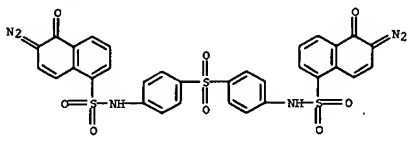
AB The title composition contains a 5-60%-imidized polyamic acid, a naphthoquinonediazide compound, and a phenolic OH-containing compound I (n = 0-3; X = H, OH, amino, monovalent organic group; ≥1 of X in 1 aromatic ring is OH; R = single bond, divalent aliphatic group). The composition is applied on a substrate, dried, patternwise irradiated with an active beam, developed with an aqueous alkali solution, and heated to form a relief pattern. The composition shows high sensitivity toward i-line and improved developability and provides a high resolution relief pattern. The composition is suitable for semiconductor device fabrication.

IT **125677-73-8P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pow. working photoresist containing partially imidized polyamic acid, naphthoquinonediazide, and phenolic compound for relief patterning)

RN 125677-73-8 CA

CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)

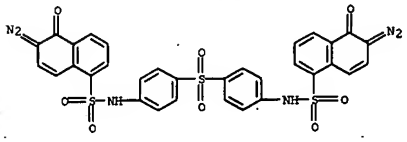
L13 ANSWER 7 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



L13 ANSWER 8 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:28672 CA
TITLE: Positive-working photoresist compositions and manufacture of electric devices thereof
INVENTOR(S): Yamazaki, Noriyuki
PATENT ASSIGNEE(S): Hitachi Chemical Du Pont Micro System Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11338154	A2	19991210	JP 1998-149945	19980529 <--
PRIORITY APPLN. INFO.:			JP 1998-149945	19980529

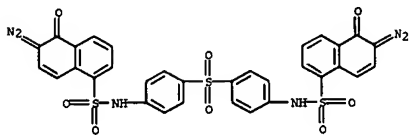
AB The compns. contain (A) alkaline solution-soluble polyimides, polyoxazoles, or their precursors, (B) o-quinonediazides, and (C) photoacid generators. A may be a polyimide precursor with repeating units C(O)R1(CO2R3)2C(O)NHR2NH (R1 = tetravalent organic group; R2 = carboxyl, phenolic OH-containing divalent organic group; R3 = monovalent organic group). The manufacturing process of elec. devices, especially semiconductor devices, involves forming interlayer dielec. films or surface protection films with the compns. The photoresists have excellent sensitivity to i-rays and give films having good solubility of exposed sites and insoly. of unexposed sites.
IT **125677-73-8**, 4,4'-Diaminodiphenylsulfone naphthoquinone-1,2-diazido-5-sulfonyl chloride ester (1:2)
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; pos.-working photoresist compns. and manufacture of elec. devices thereof)
RN 125677-73-8 CA
CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 9 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:28666 CA
TITLE: Positive-working photosensitive resin compositions and formation of relief patterns thereof
INVENTOR(S): Sasaki, Mamoru
PATENT ASSIGNEE(S): Hitachi Chemical Du Pont Micro System Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11338157	A2	19991210	JP 1998-149944	19980529 <--
PRIORITY APPLN. INFO.:			JP 1998-149944	19980529

AB The compns. contain (A) acid group-containing polymers, preferably polyimide or polyoxazole precursors, (B) photoacid generators, and (C) OCN(CH2)nSiR3-m(OR')m (n = 1-10, R, R' = C1-5 alkyl, m = 0-3). A may be a polyamic acid esters with repeating units C(O)R1(CO2R3)2C(O)NHR2NH (R1 = tetravalent organic group; R2 = carboxyl, phenolic OH-containing divalent organic group; R3 = monovalent organic group). Formation process of relief patterns with the compns. is also claimed. The photoresists are especially suitable for protection films and interlayer dielec. films for semiconductor devices.
IT **125677-73-8**, 4,4'-Diaminodiphenylsulfone naphthoquinone-1,2-diazido-5-sulfonyl chloride ester (1:2)
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; pos.-working photoresist compns. and manufacture of elec. devices thereof)
RN 125677-73-8 CA
CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 10 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:293334 CA
TITLE: Thermal recording material providing durable image
INVENTOR(S): Tominaga, Nobuhide; Oya, Keiji; Shigeno, Koichi
PATENT ASSIGNEE(S): Asahi Denka Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11286175	A2	19991019	JP 1998-107083	19980402 <--
PRIORITY APPLN. INFO.:			JP 1998-107083	19980402
OTHER SOURCE(S):	MARPAT 131:293334			

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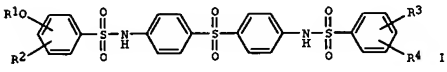
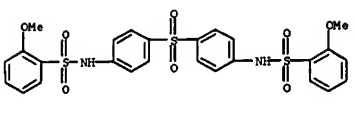


I

AB The title material contains a diphenylsulfone derivative I (R1 = C1-8 alkyl, Ph; R2-4 = H, halo, PhO, NO2, C1-8 alkyl, alkoxy) as a color developer in the heat-sensitive layer. The material provides storage-stable images with high d. without background fog.
IT **246537-83-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(storage-stable thermal recording material containing diphenylsulfone as color developer)
RN 246537-83-7 CA
CN Benzenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[2-methoxy- (9CI) (CA INDEX NAME)



L13 ANSWER 11 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:264839 CA
TITLE: Thermosensitive recording material
INVENTOR(S): Hayakawa, Kunio; Morita, Mitsunobu
PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11277906	A2	19991012	JP 1998-98152	19980327 <--
PRIORITY APPLN. INFO.:			JP 1998-98152	19980327
OTHER SOURCE(S):	MARPAT 131:264839			

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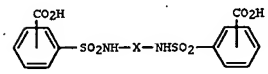
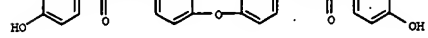


I

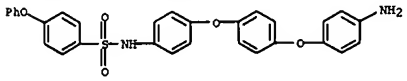
AB In the title recording material having a heat-sensitive recording layer containing a leuco dye and a developer, ≥1 compound containing ≥2 aromatic sulfonyl groups having an acidic functional group as the substituent I (x = divalent group) is contained. An under coat layer containing spherical hollow plastic particle is placed between the support and the heat-sensitive recording layer. The invention recording material shows superior resistance to oil and plasticizer and heat, and shows high image storage stability.
IT **52692-07-6**
RL: MOA (Modifier or additive use); USES (Uses)
(contained in recording layer for thermosensitive recording material)
RN 52692-07-6 CA
CN Benzenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[4-hydroxy- (9CI) (CA INDEX NAME)



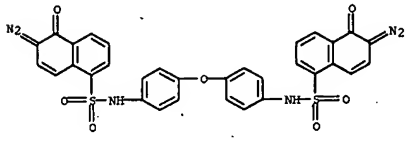
L13 ANSWER 12 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:264793 CA
TITLE: Material having hydrophilic and hydrophobic parts, its manufacture, and printing apparatus using water-thinned ink therefrom
INVENTOR(S): Sasaki, Hiroshi; Shoji, Mitsuyoshi; Kawashima, Kenichi; Ito, Yutaka
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11265058	A2	19990928	JP 1998-67446	19980317 <--
JP 3340377	B2	20021105		
PRIORITY APPLN. INFO.:			JP 1998-67446	19980317

OTHER SOURCE(S): MARPAT 131:264793
AB The material is characterized by that a material of which surface has water contact angle ≥150°, preferably a perfluoroalkyl polyether, is applied thereon parts with water contact angle 80-130° by light exposure and then bonded or adhered thereon with a material having water contact angle ≤70°, preferably an oxysilane. A manufacturing method of the material, a letterpress printing apparatus using the material, and a convexo-concave surface forming method are also claimed. The material shows high water repellency.
IT 208183-16-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manufacture of material having surface with hydrophilic and hydrophobic parts and printing plates using water-thinned ink)
RN 208183-16-8 CA
CN Benzenesulfonamide, N-[4-[4-(4-aminophenoxy)phenoxy]phenyl]-4-phenoxy- (9CI) (CA INDEX NAME)



L13 ANSWER 13 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)
(manuf. of electronic device including formation of relief pattern by imidation of developed image made of pos. working photosensitive polyamic acid compn.)
RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 13 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:164292 CA
TITLE: Positively working photosensitive polymer composition, varnish of the composition, and electronic device manufactured by using the varnish
INVENTOR(S): Okabe, Yoshiaki; Maegawa, Yasunari; Mitsuwa, Takao; Ueno, Takumi
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11212258	A2	19990806	JP 1998-12404	19980126 <--
PRIORITY APPLN. INFO.:			JP 1998-12404	19980126

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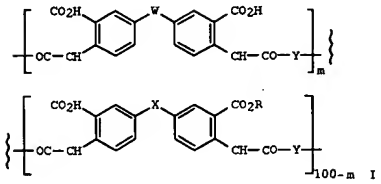
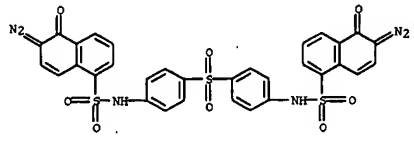


AB The pos.-working photosensitive composition contains polyamic acid-polyamic acid ester I [W, X = SO, SO2, CO, C(CF3)2; Y = divalent organic group forming aromatic diamine; m = 15-85 (mol%); R = C1-4 alkyl] and a photosensitive agent mixture comprising Phn[ZNHC(O)NHT(DNQ)]p and A(DNQ)q (Z, A = Ph, benzyl; T = phenylene, alkylene, DNQ = 1,2-naphthoquione-2-diazido-5-sulfonyloxy, 1,2-naphthoquione-2-diazido-5-sulfonylamino; n = 0, 1; p, q = 1-3). The varnish consists of the polyamic acid-polyamic acid ester, 5-40 weight% (based on the polymer) quinonediazide mixture, and an organic solvent and the resin concentration in the varnish is 5-45 weight%. The electronic device is manufactured by using the varnish by applying on a substrate, prebaking, exposing through a photomask, developing with aqueous alkali, and imidating under heating to form a pos. relief pattern. Passivation films, interlayer insulator films, etc., can be formed without etching process.
IT 125677-72-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

L13 ANSWER 14 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:122984 CA
TITLE: Positive-working photosensitive resin composition and relief pattern formation using same
INVENTOR(S): Sasaki, Mamoru; Nunomura, Masataka; Ohe, Tadayuki; Anzai, Takanori; Uchimura, Shunichiro
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174679	A2	19990702	JP 1997-339817	19971210 <--
PRIORITY APPLN. INFO.:			JP 1997-339817	19971210

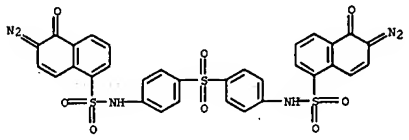
AB The title resin composition contains photoacid generator and a mixture of 2 kinds of polyimide precursors having CO2H or phenolic OH group which have a dissoln. rate ratio to aqueous alkali solns. of ≥5. The composition is coated on a substrate, dried, exposed to active ray, developed with an aqueous alkali solution, and heat-treated to form a relief pattern. The composition shows high sensitivity toward active ray such as i-line and provides a high quality relief pattern using aqueous alkali solns.
IT 125677-73-8, 4,4'-Diaminodiphenylsulfone naphthoquinone-1,2-diazido-5-sulfonyl chloride ester (1:2)
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; photoresist composition containing alkali dissoln. rate-controlled polyimide precursors)
RN 125677-73-8 CA
CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 15 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:122983 CA
TITLE: Positive-working photosensitive resin composition and relief pattern formation using same
INVENTOR(S): Sasaki, Mamoru; Nunomura, Masataka; Ohe, Tadayuki; Uchimura, Shunichiro
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

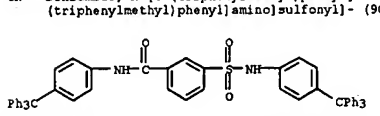
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174678	A2	19990702	JP 1997-339816	19971210 <--
JP 3436673	B2	20030811		
PRIORITY APPLN. INFO.:			JP 1997-339816	19971210

AB The title resin composition contains a polyamic acid ester having a repeating unit NHCOR1(CO2R2)(CO2R3)CONHR4 (R1 = tetravalent organic group; R2, R3 = hydrocarbon group; R4 = divalent organic group having ≥1 phenolic OH or CO2H group) and a photoacid-generator and the dissoln. rates to aqueous alkali solution of the film made of the composition are ≤30 and ≥80 nm/s before and after irradiation with active ray at 700 mJ/m2, resp. The composition is coated on a substrate, dried, exposed to active ray, developed with an aqueous alkali solution, and heat-treated to form a relief pattern. The composition shows high sensitivity toward active rays and provides a high quality relief pattern using aqueous alkali solns.
IT **125677-73-8**
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator; pos. photoresist composition containing polyamic acid ester and acid generator)
RN 125677-73-8 CA
CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 16 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:102270 CA
TITLE: Size complementarity of macrocyclic cavities and stoppers in amide-rotaxanes
AUTHOR(S): Heim, Christiane; Affeld, Ansgar; Nieger, Martin; Vogtle, Fritz
CORPORATE SOURCE: Kekule-Institut Organische Chemie Biochemie, Univ. Bonn, Bonn, D-53121, Germany
SOURCE: Helvetica Chimica Acta (1999), 82(5), 746-759
CODEN: HCACAV; ISSN: 0018-019X
PUBLISHER: Verlag Helvetica Chimica Acta
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:102270

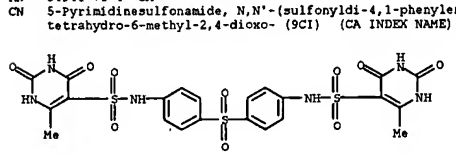
AB New [2]rotaxanes were prepared by the threading and the slipping procedure, the latter having the advantage of not needing templating interactions. As a consequence, the first [2]rotaxane consisting of a tetraamide macrocycle and a pure hydrocarbon thread was synthesized. Sterically matching wheels and axles being the basic requirement of a successful slipping approach to rotaxanes, mono- and bis-homologous wheels were synthesized and mech. connected to amide axles which were stoppered with blocking groups of different spatial demand. The deslipping kinetics of the resulting rotaxanes were measured and compared. It emerges that even slight increases in the wheel size require larger stoppers to stabilize the mech. bond. Moreover, when the deslipping rate of a rotaxane with amide wheel and amide axle was determined in either DMF or THF, a strong dependence on the solvent polarity, which is caused by a differing extent of intramol. H-bonds between the wheel and the axle, was observed As expected, no such dependence was detected for a rotaxane with amide wheel and hydrocarbon axle whose components cannot interact via H-bonds. The comparison of the sterically matching pairs of macrocycles and blocking groups, found by a systematic fitting based on the results of slipping and deslipping expts., with other rotaxane types bearing similar stoppers allows conclusions concerning the relative cavity size of wheels of various structure.
IT **177083-12-4P**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and slipping/deslipping kinetics of amide rotaxanes)
RN 177083-12-4 CA
CN Benzamide, N-[4-(triphenylmethyl)phenyl]-3-[[[4-(triphenylmethyl)phenyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:97171 CA
TITLE: Effect of pyrimidine derivatives on adenylate cyclase system of immunocompetent cell regulation in vitro
AUTHOR(S): Slabnov, Yu. D.; Cherepnev, G. V.; Karimova, F. G.; Garaev, R. S.
CORPORATE SOURCE: Research Department, Republican Medical Diagnostic Center, Kazan, Russia
SOURCE: Bulletin of Experimental Biology and Medicine (Translation of Byulleten Eksperimental'noi Biologii i Meditsiny) (1998), 125(6), 588-590
CODEN: BEXBAN; ISSN: 0007-4888
PUBLISHER: Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The pyrimidine derivs. xymedone and diucifone decrease the activity of adenylate cyclase, as shown in expts. on thymocytes and lymphocytes of guinea pig lymph nodes and human peripheral blood lymphocytes. Inhibition of the enzyme depends on the subpopulation and species appurtenance of immunocompetent cells. The relationship between the results and effects of pyrimidine derivs. in experiment and clin. setting is discussed.
IT **34941-71-4**, Diucifone
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of pyrimidine derivs. on adenylate cyclase system of immunocompetent cell regulation in vitro)
RN 34941-71-4 CA
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



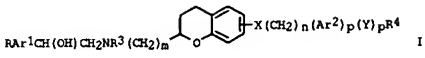
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 18 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 131:73558 CA
TITLE: Preparation of chromansulfonamides as β-3 adrenoreceptor agonists
INVENTOR(S): Ladouceur, Gaetan H.; Connell, Richard D.; Baryza, Jeremy; Campbell, Ann-Marie; Lease, Timothy G.; Cook, James H.
PATENT ASSIGNEE(S): Bayer Corporation, USA
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

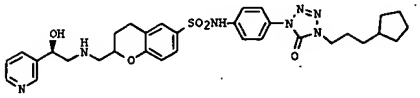
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9932475	A1	19990701	WO 1998-US24627	19981117 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9810489	A	19990520	ZA 1998-10489	19981117 <--
CA 2314925	AA	19990701	CA 1998-2314925	19981117 <--
AU 9914183	A1	19990712	AU 1999-14183	19981117 <--
AU 751015	B2	20020808		
EP 1054881	A1	20001129	EP 1998-958070	19981117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001526281	T2	20011218	JP 2000-525412	19981117
TW 502032	B	20020911	TW 1998-87118968	19981117
US 6051586	A	20000418	US 1998-199014	19981123
US 2003073839	A1	20030417	US 2000-520201	20000307
US 2004072843	A1	20040415	US 2003-667286	20030919
US 6903218	B2	20050607		
PRIORITY APPLN. INFO.:			US 1997-994585 A	19971219
			US 1997-122061P P	19971219
			WO 1998-US24627 W	19981117
			US 1998-199014 A3	19981123
			US 2000-520201 B1	20000307

OTHER SOURCE(S): MARPAT 131:73558
GI

L13 ANSWER 18 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



I



II

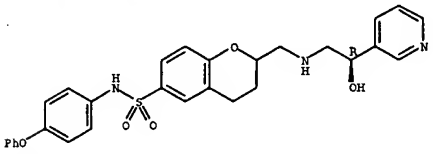
AB Title compds. [I; R = H, OH, O, halo, haloalkyl, alkyl, cyano, NO2, N(R1)2, SR1, OR1, SO2R2, CO2R2, COR2, NR1SO2R2, NR1COR2; R1 = H, (substituted) alkyl, cycloalkyl, Ph, naphthyl; R2 = R1, N(R1)2; R3 = H, alkyl, RAr1CH(OH)CH2; Ar1 = Ar1OCH2, Ph, (fused) heterocyclyl; m = 1-3; n = 0-4; X = piperazinylsulfonyl, NR3SO2; Ar2 = (substituted) (fused) Ph, heterocyclyl; Y = OY, NR1, NR1CO, (oxo-substituted) cycloalkyl, heterocyclyl; p = 0, 1; R4 = H, R1, R2, oxo, (substituted) heteroalkyl, alkyl, haloalkyl], were prepared for treatment of diabetes and obesity (no data). Thus, (R)-(pyrid-3-yl)oxirane (preparation given) and 2-aminomethylchroman-6-sulfonic acid [4-[4-(3-cyclopentylpropyl)-5-oxo-4,5-dihydrotetrazol-1-yl]phenyl]amide (preparation given) were refluxed in EtOH/H2O to give 11% title compound (II).

IT 228709-93-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of chromansulfonamides as β-3 adrenoreceptor agonists)

RN 228709-93-1 CA

CN 2H-1-Benzopyran-6-sulfonamide, 3,4-dihydro-2-[[[(2R)-2-hydroxy-2-(3-pyridinyl)ethyl]amino]methyl]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

L13 ANSWER 18 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 131:65895 CA

TITLE: Positive-working photosensitive polyimide precursor and relief pattern formation using it

INVENTOR(S): Okaba, Kaori; Fujieda, Nagatoshi; Watanabe, Naoki

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11153868	A2	19990608	JP 1997-318081	19971119 <--

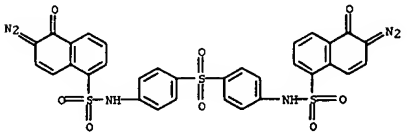
PRIORITY APPLN. INFO.: JP 1997-318081 19971119

AB The polyimide precursor composition comprises a polyamic acid with imidation degree 5-60% and a compound generating acid by light. The relief pattern is formed by coating the composition on a substrate, drying, irradiating, developing with an aqueous alkaline solution, and heat-treating. The composition is sensitive to i-ray, developable with aqueous alkaline solution even when the layer is thick, and gives clear relief patterns.

IT 125677-73-8
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist composition containing imidation degree-controlled polyamic acid and photo-acid generator)

RN 125677-73-8 CA

CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 20 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 131:51984 CA

TITLE: Silver halide photographic material to be processed with developer not containing primary aromatic amine

INVENTOR(S): Ishidai, Keiko; Kaneko, Yutaka

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11153851	A2	19990608	JP 1998-12603	19980126 <--

PRIORITY APPLN. INFO.: JP 1997-252076 A 19970917

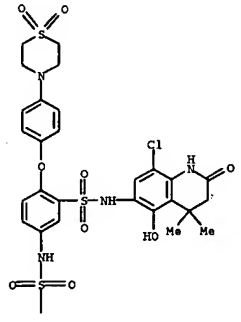
OTHER SOURCE(S): MARPAT 131:51984

AB The silver halide photog. material contains a reducing agent R1-NHNH-X-R2(R1 = aryl, heterocycle; R2 = alkyl, alkenyl, alkynyl , aryl, heterocycle; X = -SO2-, -COCO-, -CO-O-, etc.) for color development and a coupler A-L1-Q1(A = coupler residual group, L1 = divalent connecting group; Q1 = heterocycle, aryl oxy, alkyl, phosphoryl) in a light sensitive layer. The photog. material provides the increased color image stability against heat and light.

IT 227619-90-1
RL: TEM (Technical or engineered material use); USES (Uses)
(coupler for silver halide photog. material)

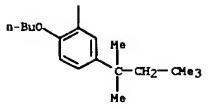
RN 227619-90-1 CA

CN Benzenesulfonamide, 2-butoxy-N-[3-[[(8-chloro-1,2,3,4-tetrahydro-5-hydroxy-4,4-dimethyl-2-oxo-6-quinolinyl)amino]sulfonyl]-4-[4-(1,1-dioxido-4-thiomorpholinyl)phenoxy]phenyl]-5-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 20 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A

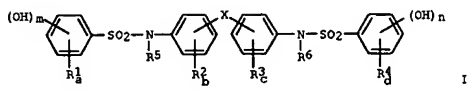


L13 ANSWER 21 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:345086 CA
TITLE: Thermal recording material
INVENTOR(S): Ohashi, Reiji; Nakano, Tomoyuki; Yanai, Koichi; Yoneshige, Seiki; Yoshioka, Hidetoshi
PATENT ASSIGNEE(S): Nihon Seishi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11123876	A2	19990511	JP 1998-221200	19980805 <--
PRIORITY APPLN. INFO.:			JP 1997-221811 A	19970818

OTHER SOURCE(S): MARPAT 130:345086
GI

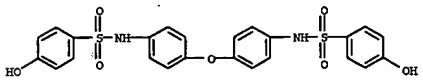


I

AB A thermal recording material comprises a color former and a color developer represented by the formula I (X = a direct bond or a divalent group; R1, R2 = alkyl, alkoxy, halogen, carboxy, alkoxycarbonyl, or carbamoyl; R2, R3 = alkyl, alkoxy, halogen, hydroxy, carboxyl, or alkoxycarbonyl; R5, R6 = H or alkyl; a, b, c, d = an integer of 0-4; m, n = an integer of 1-5).

IT 52692-07-6P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and use as color developer for thermal recording material)

RN 52692-07-6 CA
CN Benzenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[4-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 22 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:252356 CA
TITLE: Preparation of 2-[(arylmethyl)phenylamino]-2-imidazolines as prostaglandin IP receptor antagonists
INVENTOR(S): Bley, Keith Roger; Clark, Robin Douglas; Jahangir, Alam; Kowalczyk, Bruce Andrew; Lopez-Tapala, Francisco Javier; Muehldorf, Alexander Victor; O'Yang, Counde; Sun, Thomas Weitao
PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.
SOURCE: Eur. Pat. Appl., 61 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 902018	A2	19990317	EP 1998-116091	19980826 <--
EP 902018	A3	20010502		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NZ 331480	A	20000228	NZ 1998-331480	19980820
US 6184242	B1	20010206	US 1998-137507	19980820
CA 2245755	AA	19990304	CA 1998-2245755	19980827 <--
IL 125982	A1	20020912	IL 1998-125982	19980828
ZA 9807925	A	19990304	ZA 1998-7925	19980831 <--
JP 11140057	A2	19990525	JP 1998-248047	19980902 <--
JP 3040752	B2	20000515		
NO 9804044	A	19990305	NO 1998-4044	19980903 <--
NO 312294	B1	20020422		
AU 9883094	A1	19990318	AU 1998-83094	19980903 <--
AU 746480	B2	20020502		
BR 9803373	A	20010424	BR 1998-3373	19980903
RU 2211834	C2	20030910	RU 1998-117245	19980903
CN 1216762	A	19990519	CN 1998-118587	19980904 <--
CN 1110484	B	20030604		
TW 432046	B	20010501	TW 1998-87114724	19980908
HK 1019334	A1	20040213	HK 1999-104374	19991007
US 6472536	B1	20021029	US 2000-666065	20000919
US 2003036655	A1	20030220	US 2002-159589	20020531
US 6596876	B2	20030722		
US 2003229123	A1	20031211	US 2003-425778	20030429
US 6693200	B2	20040217		
US 2004122053	A1	20040624	US 2003-731607	20031209
PRIORITY APPLN. INFO.:			US 1997-57808P	P 19970904
			US 1998-89916P	P 19980619
			US 1998-88015P	P 19980604
			US 1998-137507	A3 19980820
			US 2000-666065	B3 20000919
			US 2002-159589	A3 20020531
			US 2003-425778	A3 20030429

OTHER SOURCE(S): MARPAT 130:252356

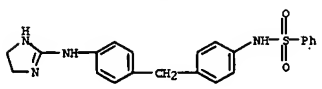
AB R1CH2ZNHR (R = 2-imidazolin-2-yl)[I; R1 = R3Z1, R5Z2, (un)substituted 4-piperidinyl, etc.; R3 = halo, (cyclo)alkyl, heterocyclyl, (di)(alkyl)amino, carbamoyl(alkyl), etc.; R5 = hydroxy(alkyl), alkoxy(alkyl), acylalkoxy, etc.; Z,Z1 = (un)substituted 1,4-phenylene; Z2 = pyrrole-, furan-, or thiophene-3-, -4-, or -5,2-diyl] were prepared as prostaglandin IP receptor antagonists (no data). Thus, PhOMe was acylated by 4-(O2N)C6H4COCl and the product treated with HBr to give 4-(HO)C6H4COC6H4(NO2)-4 which was etherified by Me2CBr and the reduced

L13 ANSWER 22 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

product condensed with 2-chloro-2-imidazoline to give I [R1 = 4-(Me2CO)C6H4, Z = 1,4-phenylene].

IT 221531-11-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-[(arylmethyl)phenylamino]-2-imidazolines as prostaglandin IP receptor antagonists)

RN 221531-11-9 CA
CN Benzenesulfonamide, N-[4-[[4-[(4,5-dihydro-1H-imidazol-2-yl)amino]phenyl]methyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L13 ANSWER 23 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:217595 CA

TITLE: Synthesis and Biological Properties of Novel Pyridinioalkanoyl Thiolesters (PATE) as Anti-HIV-1 Agents That Target the Viral Nucleocapsid Protein Zinc Fingers

AUTHOR(S): Turpin, Jim A.; Song, Yongsheng; Inman, John K.; Huang, Mingjun; Wallqvist, Anders; Maynard, Andrew; Covell, David G.; Rice, William G.; Appella, Ettore

CORPORATE SOURCE: Laboratory of Antiviral Drug Mechanisms and Laboratory of Experimental and Computational Biology National Cancer Institute-Frederick Cancer Research and Development Center, SAIC Frederick, Frederick, MD, 21702-1201, USA

SOURCE: Journal of Medicinal Chemistry (1999), 42(1), 67-86
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Nucleocapsid p7 protein (NCp7) zinc finger domains of the human immunodeficiency virus type 1 (HIV-1) are being developed as antiviral targets due to their key roles in viral replication and their mutationally nonpermissive nature. On the basis of our experience with sym. disulfide benzamides (DIBAs; Rice et al. science 1995, 270, 1194-1197), we synthesized and evaluated variants of these dimers, including sets of 4,4'- and 3,3'-disubstituted di-Ph sulfones and their monomeric benzisothiazolone derivs. (BITA). BITAs generally exhibited diminished antiviral potency when compared to their disulfide precursors. Novel, monomeric structures were created by linking haloalkanoyl groups to the benzamide ring through -NH-C(:O)- (amide) or -S-C(:O)- (thiolester) bridges. Amide-linked compds. generally lacked antiviral activity, while haloalkanoyl thiolesters and non-halogen-bearing analogs frequently exhibited acceptable antiviral potency, thus establishing thiolester benzamides per se as a new anti-HIV chemotype. Pyridinioalkanoyl thiolesters (PATEs) exhibited superior anti-HIV-1 activity with minimal cellular toxicity and appreciable water solubility PATEs were shown to preferentially target the NCp7 Zn finger when tested against other mol. targets, thus identifying thiolester benzamides, and PATEs in particular, as novel NCp7 Zn finger inhibitors for in vivo studies.

IT **221119-80-8P**

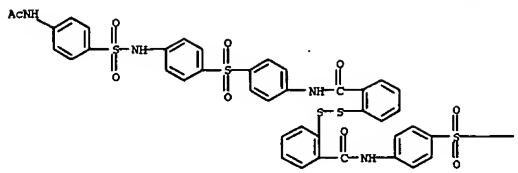
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and structure activity relations of novel pyridinioalkanoyl thiolesters as anti-HIV-1 agents targeting viral nucleocapsid protein zinc fingers)

RN 221119-80-8 CA

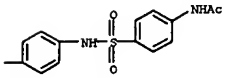
CN Benzamide, 2,2'-dithiobis[N-[4-[[4-[[[4-(acetylamino)phenyl]sulfonyl]amino]phenyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 23 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 24 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:209497 CA

TITLE: Substituted benzene compounds as antiproliferative and cholesterol lowering agents

INVENTOR(S): Medina, Julio Cesar; Clark, David Louis; Flygare, John A.; Rosen, Terry J.; Shan, Bei

PATENT ASSIGNEE(S): Tularik Inc., USA

SOURCE: PCT Int. Appl., 113 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

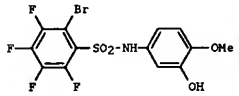
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9910320	A1	19990304	WO 1998-US16781	19980813	<--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
US 6284923	B1	20010904	US 1997-917025	19970822	
CA 2301842	AA	19990304	CA 1998-2301842	19980813	<--
AU 9887824	A1	19990316	AU 1998-87824	19980813	<--
AU 748826	B2	20020613			
EP 1005453	A1	20000607	EP 1998-939384	19980813	
EP 1005453	B1	20041027			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2001514167	T2	20010911	JP 2000-507650	19980813	
AT 280756	E	20041115	AT 1998-939384	19980813	
US 2002013496	A1	20020131	US 2001-872463	20010531	
US 6388131	B2	20020514			

PRIORITY APPLN. INFO.: US 1997-917025 A 19970822
WO 1998-US16781 W 19980813

OTHER SOURCE(S): MARPAT 130:209497

GI



I

AB RS(O)nYR1 [R = (un)substituted Ph; R1 = (un)substituted aryl, heteroaryl; Y = bond, o, (un)substituted NH, NHCH2, CH2; n = 1, 2] were prepared for use as antiproliferative and anticholesteremic agents. Thus, 1-bromo-2,3,4,5-tetrafluorobenzene was chlorosulfonylated and treated with 3,4-HO(MeO)C6H3NH2 to give the sulfonamide I. I had an antiproliferative IC50 against HeLa cells of 0.15 μM and a min. dose for maximum induction of LDL receptors of 0.15 μM.

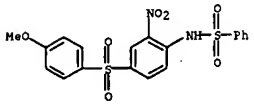
IT **220990-65-8P**

L13 ANSWER 24 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzenesulfonanilides and diaryl sulfones as antiproliferative and anticholesteremic agents)

RN 220990-65-8 CA

CN Benzenesulfonamide, N-[4-[(4-methoxyphenyl)sulfonyl]-2-nitrophenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 362 CA COPYRIGHT 2005 ACS on STN

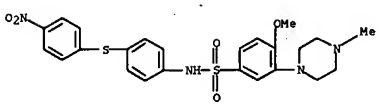
ACCESSION NUMBER: 130:125095 CA
TITLE: Preparation of (hetero)aryl substituted benzenesulfonamides for the treatment of anxiety and/or depression
INVENTOR(S): Bromidge, Steven Mark; Moss, Stephen Frederik
PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9902502	A2	19990121	WO 1998-EP4973	19980709 <--
WO 9902502	A3	19990603		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2296033	AA	19990121	CA 1998-2296033	19980709 <--
AU 9892578	A1	19990208	AU 1998-92578	19980709 <--
AU 736256	B2	20010726		
EP 994862	A2	20000426	EP 1998-945162	19980709
EP 994862	B1	20050601		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
TR 200000073	T2	20000621	TR 2000-200000073	19980709
BR 9810991	A	20000808	BR 1998-10991	19980709
JP 2002511097	T2	20020409	JP 1999-508186	19980709
CN 1087294	B	20020710	CN 1998-806921	19980709
AT 296811	E	20050615	AT 1998-945162	19980709
ZA 9806139	A	20000110	ZA 1998-6139	19980710
TW 470743	B	20020101	TW 1998-87111166	19980710
NO 2000000108	A	20000110	NO 2000-108	20000110
US 6316450	B1	20011113	US 2000-462652	20000110

PRIORITY APPLN. INFO.: GB 1997-14530 A 19970711
GB 1997-24530 A 19971119
WO 1998-EP4973 W 19980709

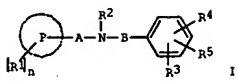
OTHER SOURCE(S): MARPAT 130:125095
GI

L13 ANSWER 25 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



● HCl

L13 ANSWER 25 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



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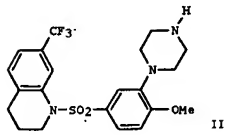

II

AB The title compds. [I; P = Ph, naphthyl, 5-7 membered heterocyclyl containing 1-4 heteroatoms selected from O, N or S, etc.; A = a single bond, C1-6 alkylene, C1-6 alkenylene; B = SO2; R1 = halo, C1-6 alkyl optionally substituted by one or more fluorine atoms, C3-6 cycloalkyl, etc.; n = 0-6; R2 = H, C1-6 alkyl, aryl C1-6 alkyl, etc.; R3 = H, halo, C1-6 alkyl, etc.; R4 = X(CH2)pR6 (wherein X = a single bond, CH2, O, etc.; p = 0-6; R6 = (un)substituted 4-7 membered heterocyclyl containing 1-3 heteroatoms selected from N, S or O, NR7R8; R7, R8 = H, C1-6 alkyl, aryl C1-6 alkyl); R5 = R3; R3R5 = (CH2)2O, (CH2)3O optionally substituted with 1 or more C1-6 alkyl groups], useful in the treatment of CNS disorders such as anxiety and depression, were prepared Thus, refluxing 1-[4-methoxy-3-(4-methylpiperazin-1-yl)benzenesulfonyl]-7-trifluoromethyl-1,2,3,4-tetrahydroquinoline with 1-chloroethyl chloroformate in 1,2-dichloroethane for 18 h followed by addition of diisopropylethylamine afforded 52% II.HCl which showed pKi > 8.5 and selectivity > 100 against human cloned 5-HT6 receptors.

IT **219961-54-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (hetero)aryl substituted benzenesulfonamides for the treatment of anxiety and/or depression)

RN 219961-54-3 CA
CN Benzenesulfonamide, 4-methoxy-3-(4-methyl-1-piperazinyl)-N-[4-[(4-nitrophenyl)thio]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L13 ANSWER 26 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:110258 CA
TITLE: Preparation of [(aminophenoxyphenyl)acetylamino]isothiazoles and -pyridines as insecticides and fungicides
INVENTOR(S): Heil, Markus; Bretschneider, Thomas; Kleefeld, Gerd; Erdelen, Christoph; Kuck, Karl-Heinz; Stenzel, Klaus; Turberg, Andreas; Mencke, Norbert
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 28 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19727162	A1	19990107	DE 1997-19727162	19970626 <--
WO 9900375	A1	19990107	WO 1998-EP3592	19980615 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9881111	A1	19990119	AU 1998-81111	19980615 <--
EP 991631	A1	20000412	EP 1998-930804	19980615
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, PT				
TR 9903230	T2	20000421	TR 1999-9903230	19980615
BR 9810941	A	20000926	BR 1998-10941	19980615
JP 2002512632	T2	20020423	JP 1999-505249	19980615
MX 9911749	A	20000630	MX 1999-11749	19991215

PRIORITY APPLN. INFO.: DE 1997-19727162 A 19970626
WO 1998-EP3592 W 19980615

OTHER SOURCE(S): MARPAT 130:110258
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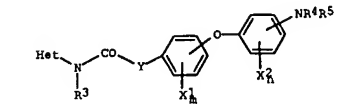

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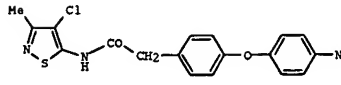


II

AB The title compds. [I; Het = substituted thiazolyl, pyridyl, pyrimidinyl,

L13 ANSWER 26 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

thiadiazolyl; R3 = H, (halo)alkyl, alkoxyalkyl, alkylcarbonyl, (un)substituted arylcarbonyl, arylsulfonyl, etc.; R4, R5 = H, COR6, CO2R7, SO2R8; R6-R8 = (halo)alkyl, (halo)alkenyl, (halo)alkynyl, alkylthioalkyl, (un)substituted cycloalkyl, etc.; X1, X2 = halo, NO2, cyano, (halo)alkyl, alkoxy; Y = alk(en)ylene, alkyleneoxy; m, n = 0-3] were prepd., e.g., by redn. of the parent nitro compds. and conversion of the resulting primary amines. For example, treating a refluxing mixt. of 2.5 g 4-chloro-3-methyl-5-[4-(4-nitrophenoxy)phenylacetylamino]isothiazole and 2.0 g Fe powder in 50 mL 50% aq. EtOH dropwise with 0.16 mL HCl in 5 mL 50% EtOH and refluxing the whole for 3 h gave 1.2 g II (m. 226°) which at 0.1% on rice seedlings gave 100% kill on Nephotettix cincticeps.

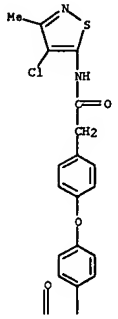
IT **219658-56-7P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(aminophenoxyphenyl)acetylamino]isothiazoles and -pyridines as insecticides and fungicides)

RN 219658-56-7 CA

CN Benzeneacetamide, N-(4-chloro-3-methyl-5-isothiazolyl)-4-[4-[(phenylsulfonyl)amino]phenoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



L13 ANSWER 26 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A

L13 ANSWER 27 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:73850 CA

TITLE: Positive-working photosensitive resin composition, pattern formation using same, and manufacture of electronic device

INVENTOR(S): Maegawa, Yasunari; Mitsuwa, Takao; Ueno, Takumi; Okabe, Yoshiaki

PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10307394	A2	19981117	JP 1997-118980	19970509 <--

PRIORITY APPLN. INFO.: JP 1997-118980 19970509

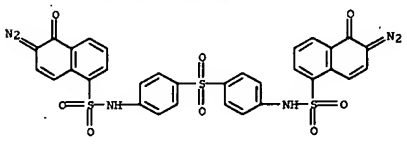
AB The title composition contains a compound that generates acid upon light irradiation and a sulfone-containing polymer of the formula {NHCOR1(CO2H)2CONHR2}x{NHCOR3CONHR2}100-x (R1-3 = imido, C6-50 alkyl containing no side chain alkoxycarbonyl group which may have a polyvalent linking group of O, S, methylene, amine, carbonyl, sulfone, ester, sulfonester, amido, urea, carbonate or carbamate, aryl, aralkyl, heterocyclic group, ≥1 of R1-3 has ≥1 sulfone group; x = 5-100 mol %) in which the carboxyl group concentration is ≤2.6 m mol/g. The composition is coated on a substrate, irradiated with an electromagnetic wave through a photomask, and developed with an alkaline developing solution to form a pattern. A method. of manufacturing an electronic device using the composition and the above process is also claimed.
The composition is developable with alkaline developing solns. and provides high-thick relief patterns with high sensitivity and resolution The composition is useful for manufacture of elec. circuits.

IT **125677-73-8P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid generator; photoresist composition containing acid generator and polyamic acid having sulfone group)

RN 125677-73-8 CA

CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



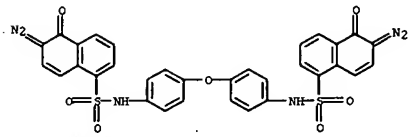
L13 ANSWER 27 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

L13 ANSWER 28 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 129:296069 CA
TITLE: Alkali-developable positive-photosensitive polyimide based on diazonaphthoquinone sensitizer
AUTHOR(S): Ueno, T.; Okabe, Y.; Miwa, T.; Maekawa, Y.; Ramos-Langlade, G.
CORPORATE SOURCE: Hitachi Research Laboratory, Hitachi Ltd., Hitachi, 319-12, Japan
SOURCE: ACS Symposium Series (1998), 706(Micro- and Nanopatterning Polymers), 358-367
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We report on the pos. alkali-developable photosensitive polyimides based on an alkali-soluble polyimide precursor as a base polymer and diazonaphthoquinone (DNQ) sensitizer to improve process stability and sensitivity. Polyamic acid ester with pendant carboxylic acid (PAE-COOH) showed good dissoln. behavior in aqueous alkali developer. The dissoln. rate of PAE-COOH was controlled by the content of pendant carboxylic acid. It was found that a photosensitive system composed of Bu ester of PAE-COOH and a DNQ compound can avoid the residue at the edge of hole patterns (footing) after development, while that of Me ester of PAE-COOH showed the residue. A DNQ compound containing sulfonamide derived from diaminodiphenylether renders improved sensitivity compared with DNQ compds. derived from phenol derivs.

IT **125677-72-7P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(sensitizer; alkali-developable pos.-photosensitive polyimide based on alkali-soluble polyimide precursor and diazonaphthoquinone sensitizer for lithog. photoresist applications)

RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 129:283432 CA
TITLE: Heat-resistant photosensitive polymer composition and formation of relief pattern
INVENTOR(S): Nunomura, Masataka; Uchimura, Shunichiro; Sasaki, Mamoru; Nishio, Shigeru
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10239844	A2	19980911	JP 1997-47455	19970303 <--
PRIORITY APPLN. INFO.:			JP 1997-47455	19970303

OTHER SOURCE(S): MARPAT 129:283432
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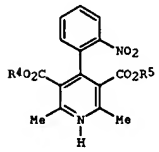


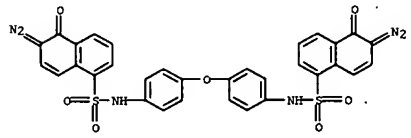
I

AB The title composition contains (a) a polyamic acid ester having a repeating unit COR1(CO2R3)2CONHR2NH (R1 = tetravalent organic group; R2 = CO2H- or phenolic OH-containing divalent organic group; R3 = monovalent organic group), (b) an o-quinonediazide compound, and (c) a pyridine derivative I (R4, R5 = alkyl). A method of forming a relief pattern is also claimed, involving the steps of coating and drying the composition on a substrate, patternwise exposing, developing, and heat- treating the coating. The pos.-working composition shows high photosensitivity and provides high quality relief patterns with high residual rate at the unexposed area.

IT **125677-72-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(heat-resistant photoresist composition containing polyamic acid ester, quinonediazide compound, and pyridine derivative)

RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)

L13 ANSWER 29 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



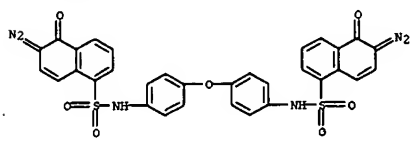
L13 ANSWER 30 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 129:283431 CA
TITLE: Heat-resistant photosensitive polymer composition and formation of relief pattern
INVENTOR(S): Nunomura, Masataka; Nishio, Shigeru; Sasaki, Mamoru; Uchimura, Shunichiro
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10239842	A2	19980911	JP 1997-47457	19970303 <--
EP 863436	A1	19980909	EP 1998-103712	19980303 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			JP 1997-47457	A 19970303
			JP 1997-138347	A 19970528
			JP 1997-246813	A 19970911

AB The title composition contains (a) a polyamic acid ester having a repeating unit COR1(CO2R3)2CONHR2NH (R1 = tetravalent organic group; R2 = CO2H- or phenolic OH-containing divalent organic group; R3 = monovalent organic group), (b) a polyamic acid having a repeating unit COR4(CO2H)2CONHR5SiR62(OSiR62)qR5NH (R4 = tetravalent organic group; R5 = divalent organic group; R6 = monovalent organic group; q ≥ 1;), and (c) an o-quinonediazide compound A method of forming a relief pattern is also claimed, involving the steps of coating and drying the composition on a substrate, patternwise exposing, developing, and heat-treating the coating. The pos.-working composition shows high photosensitivity and developability and provides a relief pattern showing good adhesion to substrate.

IT **125677-72-7P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(heat-resistant photosensitive composition containing polyamic acid, polyamic acid ester, and quinonediazide compound)

RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 31 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 129:237670 CA
TITLE: Heat-resistant photosensitive polymer composition for forming patterns for semiconductor device fabrication
INVENTOR(S): Nunomura, Masataka; Sasaki, Mamoru; Uchimura, Shunichiro; Ohe, Masayuki; Nishio, Shigeru
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

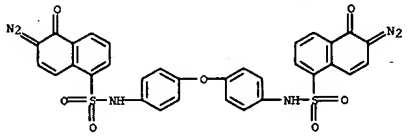
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 863436	A1	19980909	EP 1998-103712	19980303 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 10239842	A2	19980911	JP 1997-47457	19970303 <--
JP 10333332	A2	19981218	JP 1997-138347	19970528 <--
JP 11084653	A2	19990326	JP 1997-246813	19970911 <--

PRIORITY APPLN. INFO.: JP 1997-47457 A 19970303
JP 1997-138347 A 19970528
JP 1997-246813 A 19970911

AB The present invention provides a heat-resistant pos.-tone photosensitive polymer composition capable of forming a heat-resistant polyimide usable as a buffer coating for an electronic component or as an interlayer dielec. film by heat treatment for semiconductor device fabrication. This composition comprises (a) a polyimide precursor or a polyimide having a carboxyl group or a phenolic hydroxyl group, (b) a polyamic acid having a siloxane bond, and (c) a photoacid generator.

IT **125677-72-7**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(photoimaging compns. for heat-resistant pattern formation containing polyamic acids and)

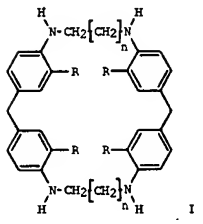
RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 32 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 129:161550 CA
TITLE: Synthesis of new water-soluble azaparacyclophanes as host compounds
AUTHOR(S): Zhang, Xiulian; Yin, Wei; Mei, Shengkai; Zhou, Maoqing
CORPORATE SOURCE: Dept. Chem., Guangdong Education Coll., Canton, 510303, Peop. Rep. China
SOURCE: Huaxue Tongbao (1998), (6), 42-45
CODEN: HHTPAU; ISSN: 0441-3776
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
GI

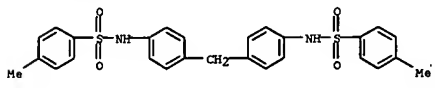


I

AB Title compds. I (R = CH3, Cl, H; n = 0, 2, 4) were prepared by cyclization of bis(4-TsNH-3-R-benzene)methane and Br(CH2)nBr in DMF and deprotection by reflux with HBr in phenol.

IT **74043-79-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of azaparacyclophanes)

RN 74043-79-1 CA
CN Benzenesulfonamide, N,N'-(methylenedi-4,1-phenylene)bis[4-methyl- (9CI) (CA INDEX NAME)



L13 ANSWER 33 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 129:142609 CA
TITLE: Positive-working photosensitive resin composition, pattern formation, and manufacture of large-scale integrated circuit using same
INVENTOR(S): Mitsuwa, Takao; Okabe, Yoshiaki; Maegawa, Yasunari; Langlade, Geradine Rames; Ueno, Isao
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

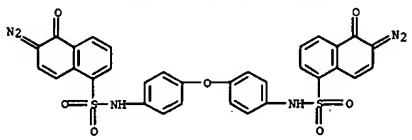
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10186658	A2	19980714	JP 1996-343595	19961224 <--

PRIORITY APPLN. INFO.: JP 1996-343595 19961224

AB The title composition comprises a resin having a repeating unit R3NHCOA(CO2R1)(CO2R2)CONH (A = tetravalent organic group constituting C≥4 tetracarboxylic acids or their derivs.; R1, R2 = H or C≤20 aliphatic carboxylic acid, ≥1 of R1 and R2 is not H; R3 = divalent organic group constituting diamine), a diazoquinone compound 1-100, and a cresol novolak resin 1-30 parts per 100 parts of the resin component. The composition is coated on a substrate, irradiated the coating with an electromagnetic wave through a light-shielding mask, and developed to form a pattern. A method of manufacturing a large-scale integrated circuit involving the above procedure is also claimed. The composition shows high developability and thermal resistance and provides high resolution relief patterns with high mech. strength.

IT **125677-72-7**, 4,4'-Bis(1,2-naphthoquinone-2-diazido-5-sulfonylamino)diphenyl ether
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist composition containing polyamic acid ester, diazoquinone compound, and cresol novolak resin)

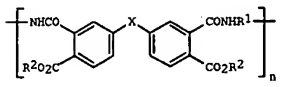
RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 34 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 129:129013 CA
TITLE: Positive-working photosensitive resin composition and polyimide film formation using it
INVENTOR(S): Okabe, Yoshiaki; Maegawa, Yasushige; Mitsuwa, Takao; Ueno, Isao; Langlade, Geradine Rames
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10171116	A2	19980626	JP 1996-331870	19961212 <--
PRIORITY APPLN. INFO.:			JP 1996-331870	19961212

GI

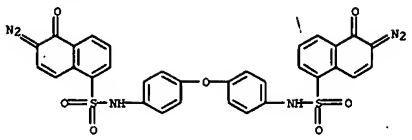


AB The title composition, developable with aqueous alkaline solns., contains a polyamic acid ester I [R1 = divalent organic group (55-85 mol% of R1 are CO2H); R2 = hydrophobic group; X = SO2; n = 6-570] and an o-quinonediazidosulfonamide R4(NR3R5)m and/or an o-quinonediazidosulfonamide sulfone ester (R3O)pR4(NR3R5)q (R3 = o-quinonediazidosulfonyl; R4 = C2-30 organic group; R5 = alkyl, H; m, q = 1-6; p = 1-5). The composition may also contain an organic solvent and the total concentration of the polymer and the o-quinonediazidosulfonamide compd(s). may be 4-45 weight%. A solid substrate is coated with the composition, pre-baked, exposed through a photomask, etched with an aqueous alkaline solution, and heat-treated to form a polyimide film. The composition provides pos. polyimide relief patterns with good profile and is useful for semiconductor devices, etc.

IT 125677-72-7P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(quinonediazidosulfonamide-containing pos.-working photosensitive polymer composition for polyimide relief pattern formation)

RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)

L13 ANSWER 34 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



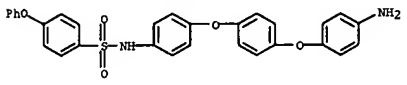
L13 ANSWER 35 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 129:47418 CA
TITLE: Material having super water repulsiveness controlled by light for lithographic master printing plate and electrophotographic photoreceptor
INVENTOR(S): Sasaki, Hiroshi; Shoji, Mitsuyoshi; Kawashima, Kenichi; Ito, Yutaka
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10114888	A2	19980506	JP 1996-269636	19961011 <--
US 6027852	A	20000222	US 1997-940951	19971008
US 6087072	A	20000711	US 1999-365869	19990803
PRIORITY APPLN. INFO.:			JP 1996-269636 A	19961011
			US 1997-940951 A1	19971008

AB The material comprises surface which has ≥ 150° contact angle towards water, wherein the material surface has < 150° contact angle upon light irradiation The material has the light-controllable super repulsive surface.

IT 208183-16-8DP, reaction products with carboxy-terminated perfluoroalkyl polyethers
RL: PNU (Preparation, unclassified); PREP (Preparation)
(material having super water repulsiveness controlled by light)

RN 208183-16-8 CA
CN Benzenesulfonamide, N-[4-[4-(4-aminophenoxy)phenoxy]phenyl]-4-phenoxy- (9CI) (CA INDEX NAME)

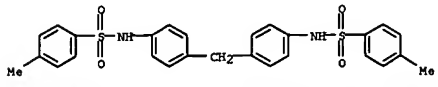


L13 ANSWER 36 OF 362 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 128:270599 CA
TITLE: Studies on water-soluble artificial receptors containing chiral side chains derived from carbohydrates. 1. Synthesis of optically active cyclophane TCP44 and its complexation selectivity for aromatic guests in acidic aqueous solutions
AUTHOR(S): Takahashi, Ichiro; Hirano, Yuuki; Arakawa, Hiroshi; Kitajima, Hidehiko; Hatanaka, Minoru; Isa, Kimio; Odashima, Kazunori; Koga, Kenji
CORPORATE SOURCE: Dep. Applied Chem. and Biotechnol., Fac. Eng., Fukui Univ., Fukui, 910, Japan
SOURCE: Heterocycles (1997), 46, 589-604
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB L-Tartrate-derived cyclophane TCP44, the first totally synthetic host with a chiral hydrophobic cavity, and its complexation properties are described. The synthesis employs 1:1 cyclization via a U-shaped precursor containing chiral C4 units derived from L-tartaric acid. TCP44, soluble in acidic water as an amine salt, displayed a complexation selectivity for hydrophobic aromatic guests. Inclusion of aromatic guests into the cavity was verified by fluorescence and 1H NMR spectra. A possible structure of inclusion cavity is discussed.

IT 74043-79-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of optically active cyclophane TCP44 and its complexation selectivity for aromatic guests)

RN 74043-79-1 CA
CN Benzenesulfonamide, N,N'-(methylenedi-4,1-phenylene)bis[4-methyl- (9CI) (CA INDEX NAME)



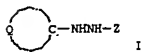
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 37 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 128:263878 CA
TITLE: Silver halide photographic material and image formation using it
INVENTOR(S): Nakamura, Takemare
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 57 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10062895	A2	19980306	JP 1996-216206	19960816 <--
US 6013421	A	20000111	US 1997-897159	19970718
PRIORITY APPLN. INFO.:			JP 1996-207708 A	19960719
			JP 1996-216206 A	19960816

OTHER SOURCE(S): MARPAT 128:263878
GI



I

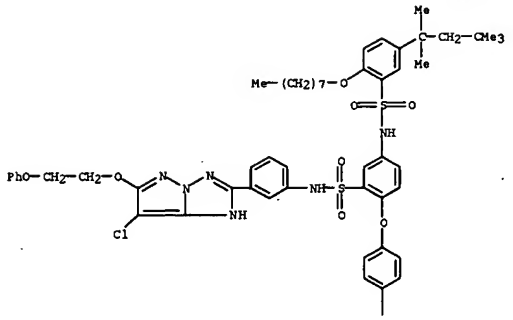
AB The title material contains, in ≥1 of the hydrophilic colloid layers formed on a support, a color developing agent I (Z = carbamoyl, acyl, alkoxycarbonyl, aryloxycarbonyl; Q = atoms required to form an unsatd. ring along with the C atom), a coloring coupler that forms a dye image upon coupling with the oxidized product of the developing agent, and a coupler that coupling-reacts with the oxidized product, but is not color-developed to an extent contributing to the image d. The material is heat-developed or developed in a solution to form an image. The material provides high Dmax and low Dmin images.

IT 205120-17-8
RL: TEM (Technical or engineered material use); USES (Uses)
(photog film containing hydrazine derivative developer and coloring and noncoloring couplers)

RN 205120-17-8 CA
CN Benzenesulfonamide, N-[3-[[[3-[7-chloro-6-(2-phenoxyethoxy)-1H-pyrazolo[1,5-b][1,2,4]triazol-2-yl]phenyl]amino]sulfonyl]-4-(4-methoxyphenoxy)phenyl]-2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)

L13 ANSWER 37 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

L13 ANSWER 38 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 128:223793 CA
TITLE: Silver halide photographic material containing color developing agent and coupler and imaging method for it
INVENTOR(S): Nakamura, Takemare; Matsumoto, Kazuhiko
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 63 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10039467	A2	19980213	JP 1996-207708	19960719 <--
US 6013421	A	20000111	US 1997-897159	19970718
PRIORITY APPLN. INFO.:			JP 1996-207708 A	19960719
			JP 1996-216206 A	19960816

GI For diagram(s), see printed CA Issue.

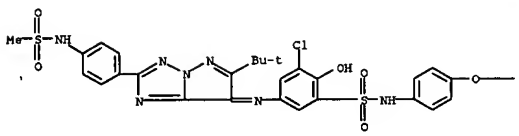
AB The material contains a color developing agent I (Z = CONH2, acyl, alkoxycarbonyl, aryloxycarbonyl; Q = atomic group forming unsatd. ring) and a coupler Cp-(Time)t-PUG [Cp = coupling group reactive with oxidized I; (Time)t-PUG = leaving group from Cp upon coupling reaction coupling; Time = PUG-generating group after released from Cp; PUG = useful group for photog.; t = 0-3] in ≥1 hydrophilic colloid layer. In the imaging method, the above material is developed by applying heat, using a liquid developer, or developing in the presence of an alkali generated from a hardly-soluble metal salt and a complexing agent therefor. The material shows high graininess and sharpness and the method can develop the material rapidly and reduce processes of wastewater treatment.

IT 204077-07-6
RL: DEV (Device component use); USES (Uses)
(coupler; silver halide photog. material containing color developing agent and coupler in hydrophilic colloid layer)

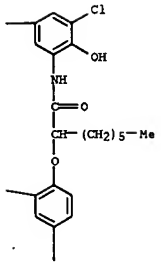
RN 204077-07-6 CA
CN Octanamide, 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[3-chloro-5-[4-[[[3-chloro-5-[[6-(1,1-dimethylethyl)-2-[4-[(methylsulfonyl)amino]phenyl]-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]-2-hydroxyphenyl]sulfonyl]amino]phenoxy]-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 38 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



PAGE 2-B

L13 ANSWER 38 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

L13 ANSWER 39 OF 362 CA COPYRIGHT 2005 ACS on STN

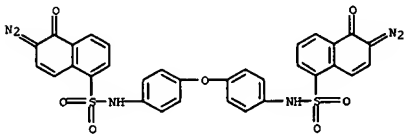
ACCESSION NUMBER: 128:186505 CA
TITLE: Photosensitive polyamic acid composition with high sensitivity providing images with high thermal resistance and relief pattern made of polyimide
INVENTOR(S): Nunomura, Masataka; Uchimura, Shunichiro; Mitsuwa, Takao
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10010717	A2	19980116	JP 1996-167464	19960627 <--
PRIORITY APPLN. INFO.:			JP 1996-167464	19960627

AB The composition comprises [C(O)R1(CO2R5)2CONHR2NH]l[C(O)R1(CO2R5)2CONHR3(R6NH2)NH]m[C(O)R2(CO2R5)2CONHR4NH]n (R1 = C≥2 tetravalent organic group; R2 = C≥2 divalent organic group with ≥1 CO2H (number of CO2H is not included in the C number); R3 = trivalent organic group containing aromatic ring; R4 = C≥2 divalent group; R5 = C≥1 organic group; R6 = SO2, CO; one of two imino groups bonded to R3 and -R6NH2 are at ortho; l = 20-90%, m = 5-15%, n = 0-79.5%) and o-quinonediazide. The relief pattern is formed by coating the above photosensitive composition, drying, exposing, developing, and heat-processing. The polymer shows high sensitivity, providing images with high thermal resistance for a short development time.

IT **125677-72-7**
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(photoresist containing polyamic acid and o-quinonediazide for heat-resistant polyimide relief pattern)

RN 125677-72-7 CA
CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 40 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 128:180412 CA
TITLE: Preparation of isoquinoline derivatives for the treatment of neurodegenerative diseases
INVENTOR(S): Ishiguro, Susumu; Shimada, Shinichi; Seya, Motohide; Okue, Masayuki; Yagi, Yuzo; Ogane, Nobuo; Saitou, Yasunari
PATENT ASSIGNEE(S): Snow Brand Milk Products Co., Ltd., Japan
SOURCE: PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805648	A1	19980212	WO 1997-JP2765	19970807 <--
W: AU, CA, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 10101650	A2	19980421	JP 1997-208425	19970718 <--
JP 3243733	B2	20020107		
CA 2234051	AA	19980212	CA 1997-2234051	19970807 <--
CA 2234051	C	20020903		
AU 9737841	A1	19980225	AU 1997-37841	19970807 <--
AU 734322	B2	20010607		
EP 855391	A1	19980729	EP 1997-934731	19970807 <--
EP 855391	B1	20031015		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, IE				
AT 252082	E	20031115	AT 1997-934731	19970807
ES 2206739	T3	20040516	ES 1997-934731	19970807
US 5959107	A	19990928	US 1998-51404	19980528 <--
PRIORITY APPLN. INFO.:			JP 1996-223271 A	19960807
			JP 1997-208425 A	19970718
			WO 1997-JP2765 W	19970807
OTHER SOURCE(S):	MARPAT 128:180412			

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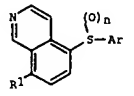
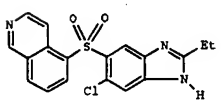


I

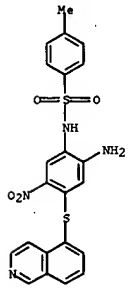


II

AB The title compds. I [Ar represents an optionally substituted aromatic ring, etc.; and n is 0, 1 or 2; R1 = H, nitro, etc.] are prepd. I have an inhibitory activity on nerve cell death of the apoptosis type. I are useful as preventives and remedies for neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, Huntington's chorea and amyotrophic lateral sclerosis, ischemic cerebral diseases such as cerebral stroke, and peripheral nerve disorders obsd. in diabetes, etc. The title compd. II at 1 μM gave about 40% inhibition of 6-hydroxydopamine-induced death of nerve cells.

IT **203339-50-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinoline derivs. for the treatment of neurodegenerative diseases)

RN 203339-50-8 CA
CN Benzenesulfonamide, N-[2-amino-4-(5-isoquinolinylthio)-5-nitrophenyl]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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     FILE 'REGISTRY' ENTERED AT 10:32:47 ON 27 JUL 2005
L1             STRUCTURE UPLOADED
L2           685 S 1L SAM
L3          1222 S L1 FULL

     FILE 'CA' ENTERED AT 10:33:31 ON 27 JUL 2005
L4           482 S L3
L5           403 S L4 AND PY<2000
L6            20 S L5 AND (PPAR OR DRUG?)
L7            18 S L5 AND DRUG?
L8             0 S L5 AND PPARY
L9             2 S L5 AND PPAR
L10           27 S L5 AND PHARM?
L11            2 S L5 AND MODULAT?
L12           41 S L6 OR L7 OR L8 OR L9 OR L10 OR L11
L13          362 S L5 NOT L12

=>

---Logging off of STN---


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